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THE

INTRODUCTORY DISCOURSE

AND THE

LECTURES

DELIVERED BEFORE THE

AMERICAN INSTITUTE OF INSTRUCTION,

IN

BOSTON, AUGUST, 1833.

INCLUDING

A LIST OF OFFICERS AND MEMBERS.

PUBLISHED UNDER THE DIRECTION OF THE BOARD OF CENSORS.

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CONTENTS.

JOURNAL OF PROCEEDINGS, - - - - - page ix

REPORT, - - - - - - - xviii

INTRODUCTORY LECTURE, by WILLIAM SULLIVAN, - 1

Definition of intelligence, 3 — of happiness, 4 — necessity of educating the young, 4 — what the proper education of an American youth should comprise, 6 — the importance of attention to the physical comfort of the young, 6 — schools uniting intellectual pursuits and mechanical labor, 8 — education defective in not teaching how to live and for what to live, 9 — cause of the error and a remedy suggested, 16 — importance of a knowledge of our political institutions and of the duties and rights of a citizen, 22 — slavery, 27 — other dangers and abuses to which a country enjoying perfect political and religious freedom is liable, 32 — means of counteracting these liabilities to abuse, 33 — objects of encouragement, 33.

LECTURE I.

ON THE IMPORTANCE OF A KNOWLEDGE OF THE PRINCIPLES OF PHYSIOLOGY TO PARENTS AND TEACHERS. By EDWARD REYNOLDS, M. D. - - - - - - - - 39

Attention of the present age to education, 41 — causes of alarm to the physiologist in the exclusive attention to the mind, 42 — ill health not a necessary consequence of study, 43 — disease induced by overaction of the mind in early life, 44 — union and sympathy between the body and the mind, 46 — definition of physiology, 48 — I. The brain the organ of thought, 49 — II. It is subject to the same laws, as regulate the functions of the other organs, 49 — III. Predominance of the brain and nervous system, in infancy, childhood and youth, 51 — IV. Of the blood vessels supplying these organs,

48273

51 — V. Softness of the brain at this period, 51 — VI. Causes of alarm in this early preponderating influence of the brain and nervous system, 53 — improper regulations and management in schools, 54 — I. Physiology enables us to comprehend the mysteries of digestion, 62 — II. The sympathies between the brain and the stomach, 62 — III. Predominance of the digestive function at its commencement, 63 — evils of violent exercise and exertion of the mind immediately after a full meal, 63 — respiration, 64 — exercise, 67 — connexion between the moral and physical man, 67.

LECTURE II.

ON THE CLASSIFICATION OF SCHOOLS. By Samuel M. Burnside. - - - - - - - - - - - 71

Objects of education, 73 — changes in our physical and intellectual nature owing to education, 74 — diversity of opinion in regard to our moral nature, 75 — moral nature a proper subject of school education, 76 — imperfections of the existing classification of schools, 76 — cause of the neglect of moral education, 78 — education too exclusively intellectual, 79 — consequences of this error, 80 — exemplified, 82 — remedy in the proper gradation of schools, 83 — infant schools, and the manner of conducting them, 84 — well suited to moral instruction, 88 — primary schools, 89 — English grammar schools, 89 — classical and high schools, 90 — schools for blacks, 91 — for apprentices, 92 — Sunday schools, 92 — cheapness of schools, according to the above arrangement, 93.

LECTURE III.

ON PRIMARY EDUCATION. By Gardner B. Perry. - 95

Influence of circumstances in forming the character, 97 — division of the subject, 100 — neither public nor private education should be exclusively adopted, 101 — advantages of domestic education, 101 — every system should be regulated with reference to the domestic institution, 103 — good effects of domestic education, upon the parent, 105 — asylums, 105 — domestic education inadequate of itself to fit men for the business of life, 107 — children to be brought early in contact with the world, 109 — fitness of public schools for this purpose, 109 — defects in our school houses, 114 — studies proper to be pursued, 115 — selection of books, 115 — mechanical helps, 119 — distinction between filling the mind with facts, and strengthening and improving the understanding, 120 — the principles of securing attention to study and order, 121.

LECTURE IV.

ON EMULATION IN SCHOOLS. By Leonard Withington. 131

Usage of language, 133 — innovations of metaphysicians on language, 135— various senses of the word emulation, 137 — good sense of the word, 139 — objections to emulation examined, 142 — not inconsistent with the gospel, 144 — the use of it not necessarily productive of excesses, 146— error in applying the principle of emulation to minds which least need it, 148 — not the only principle to be appealed to, 149 — error in the conduct of education in our large cities, 150 — danger of inconsiderate innovations, 151.

LECTURE V.

ON THE BEST METHOD OF TEACHING THE ANCIENT LANGUAGES. By Alpheus S. Packard. - - - - - 153

What is implied in the acquisition of the ancient languages, 155 — the same principles to be pursued in languages as in other branches of knowledge, 157 —the best course, that which nature points out, 158—the natural course considered, 158 — two ways of presenting general truths to the mind, 160 — that which is to be pursued in the languages, 161 — method formerly pursued, 163 — objections to the inductive method considered, 164 — different influences of the inductive and of the old method, on the intellectual habits, 167 — practical details of the course recommended, 168 — translating for the pupil and directing his attention to the nature and peculiarities of the language, 170 — analysis, 171 — writing exercises and double translations, 171 —reviewing, 172 — reading audibly, 174 — committing to memory portions of the language, 174—Hamiltonian system, and that of the Hazlewood school, 175 — objections to interlinear translations, 176 — interpretation of language, 178 — necessary helps, 179 — course pursued at preparatory schools and colleges faulty in the selection of text books, 180 — objections to books of extracts, 181.

LECTURE VI.

ON JACOTOT'S METHOD OF INSTRUCTION. By George W. Greene. - - - - - - - - - - - - 185

Choice of text books, 188 — pronunciation, 188 — the epitome, and the manner of learning it, 189 — examination, 190 — study of the grammar, 192 —narration, 194 — imitation, 195 — composition, 195 — translation, 198 — repetition, 199 — constant reference to the epitome, 200 — correction, 201 — this method applicable to all departments of study, 202 —habits of study and action which this method has a tendency to form, 205.

LECTURE VII.

ON THE BEST METHOD OF TEACHING GEOGRAPHY. By W. C. Woodbridge. - - - - - - - - - - 209

Objects to be attained in this study. Advantages to the traveller, merchant, &c, 209 — to others — comparison of the ignorant and well informed. Expansion of mind produced, 211 — elevation — foundation of Geographical knowledge, 212 — elementary ideas, 213 — danger of mechanical study. — Observation of nature, 215 — measurement — drawing maps, 217 — transition from visible to invisible objects — astronomy, 219 — study of maps, — globes, 222 — models, — maps in relief, — profiles of a country, 224 — engravings, figures and emblems, on maps, 226 — questions, physical geography, outline and skeleton maps, 229 — importance of comparing, temperature and productions, 232 — inhabitants of the earth, — natural families, — their institutions, 234 — artificial divisions, — statistics, — utility of classing numbers, 237 — preliminary lessons in political geography, — importance of leading the pupil to the Creator of the world, 239.

LECTURE VIII.

ON THE NECESSITY OF EDUCATING TEACHERS. By Samuel R. Hall. - - - - - - - - - - - - 241

The want of qualified teachers and of seminaries for educating them, 243 — lively interest of the public in other subjects, 244 — no adequate reason to justify indifference in this, 245 — for other professions and arts preparatory discipline is considered essential, 246 — our desire to employ those of talents and skill in other callings, 248 — error of the supposition that there are already schools enough, 249 — statistics corroborative of deficiency, 249 — improbability of having good teachers unless they are educated for the profession, 251 — remedy for the present evil, 254 — existing seminaries in which teachers are educated, 255 — facts further illustrative of the want of adequate instructers, 256 — objections considered, 257.

LECTURE IX.

ON THE ADAPTATION OF INTELLECTUAL PHILOSOPHY TO INSTRUCTION. By Abijah R. Baker. - - - 261

Importance of the subject, 263 — definition of Intellectual Philosophy, 264 — The intimate relation between this philosophy and the art of education, drawn, — I. From the nature of the truths of this science and the ultimate

object of education, 265 — II. From the successes and failures of different teachers, 268 — III. From the fact that school committees, trustees, &c, recognise in practice the principle contended for, 269 — IV. From the aid which metaphysics afford the teacher 271, — First, this science will enable him to discover the wants of his pupils, 271 — Secondly, a practical knowledge of it will assist him in the selection of studies proper for his pupils, 276 — Thirdly, it enables him to direct students to a proper method of prosecuting their studies, 283 — Lastly, the advantage of this study to the teacher in the communication of his own knowledge, 285 — mode of acquiring the science, 287.

LECTURE X.

ON THE BEST MODE OF TEACHING NATURAL PHILOSOPHY.
By Benjamin Hale. - - - - - - - - - 289

Mode of teaching to be varied according to the capacities and acquirements of the pupils, 291 — this science unsuited to children, 292 — nature of the science, 292 — two kinds of proof, 293 — method to be pursued without the aid of mathematical science, — I. Experiments must be made accurately and so as to amount to proofs, 293 — II. Numerical solutions, 294 — III. Questions which do not admit of numerical solutions, but yet teach the learner to think, 297 — tendency of the present age to level science to the meanest capacities, 298 — this science necessarily allied to mathematics, 299 — moral influence of the study, 300 — should be pursued as an exact science, — 301 — not an unattractive study pursued in the way recommended, 302 — means of making the study, rigorously pursued, interesting to students, 303 — whether instruction should be given from text books, or lectures, or both, 305—neither to be dispensed with, 306 — in what manner they should be combined, 308.

LIST OF OFFICERS. - - - - - - - - - 310

CATALOGUE OF MEMBERS, - - - - - - - 312

JOURNAL OF PROCEEDINGS.

ANNUAL MEETING.

SENATE CHAMBER, *Aug.* 22, 1833.

THE Institute came to order at 9 o'clock, A. M., Mr SULLIVAN, Senior Vice President, in the chair. The Recording Secretary, Mr DURGIN, having resigned,

Voted, That A. W. PIKE be requested to act as Secretary pro tempore.

Some of the more important items of the records of the last year were then read.

Voted, That Messrs PIKE and RYDER be a committee to report for the papers the doings of the Institute from day to day, and to announce the lectufes and other exercises for the following day.

The Treasurer's Report was read and referred to the Committee of Finance.

On motion of Mr W. C. WOODBRIDGE,

Voted, That the Committee of Arrangements employ one or more reporters, to attend the session of the Institute, to take the discussions and unwritten lectures, should there be any.

Moved by Mr JOHNSON, of Philadelphia, that the doors of the lecture room be open to all who may wish to attend. After a few remarks from several of the members,

Voted, That the subject be referred to Messrs JOHNSON, RYDER and WOODBRIDGE, to report upon the same.

Messrs MACKINTOSH, TITCOMB, RYDER, FAIRBANK and METCALF, were requested to attend to seating the audience during the session.

Messrs Johnson, Metcalf, B. D. Emerson, J. G. Carter, W. Adams, Fairbank and Ryder, were appointed a committee to nominate for the offices of the Institute for the ensuing year.

Report of the Curators was read and accepted.

Voted, That the hours for meeting of the Institute be half past 8 o'clock in the morning, and 3, P. M. during the session.

Voted, That the lectures be given at 10 and half past 11, A. M. and at half past 3, P. M.

After a recess of half an hour, the Institute repaired to the Representatives' Hall to hear the Introductory Lecture, which, after an appropriate prayer offered by Dr Sharp, was read at half past 11, by Mr W. Sullivan, of Boston.

The Institute then adjourned.

A. W. PIKE, *Rec. Sec'ry pro tem.*

Afternoon, Aug. 22.

The Institute met at 3 o'clock.

At half past 3, Rev. S. R. Hall, Principal of the Teachers' Seminary, Andover, delivered a lecture 'On the Education and Qualification of Teachers.' After the lecture, a discussion was held on 'The relative Importance of the Development of the Faculties and the Acquisition of Knowledge, as Objects of Elementary Education.' Mr Carter, of Lancaster, opened the discussion — was followed by Mr Johnson, of Philadelphia, Messrs Woodbridge and Titcomb, of Boston.

After the company retired, the Institute proceeded to business, Mr Sullivan in the chair.

Mr Johnson, of the Committee of Nominations, reported a list of officers of the Institute for the coming year, which with a slight amendment was accepted; and the committee was requested to procure the printing of a number of copies sufficient for the use of the Institute.

Voted, That Mr Titcomb be added to the committee previously appointed to report in the daily papers.

Adjourned to meet at half past 8, to-morrow morning.

A. W. PIKE, *Rec. Sec'ry pro tem.*

Friday, Aug. 23, 1833.

The Institute met according to adjournment.

Mr Johnson in the chair.

The doings of the preceding day were read.

Letters were read from Bishop Hopkins, of Vermont, and Dr Flint, of Boston, stating that circumstances which they had not anticipated, would prevent their lecturing before the Institute on the subjects assigned them. Letters were also read from President Wayland, and several other gentlemen, officers of th Institute, declining a re-election.

The Institute having been informed by Mr Woodbridge, that the American School Agents' Society were about to hold a public meeting in the city, in order to present in an address and report, the facts they have collected on the state of education in the United States,

Resolved, That the committee of the American School Agents' Society be requested to present, to-morrow at half past 11, any facts they may have collected upon the general subject of education.

At 10 o'clock, the Rev. L. Withington, of Newbury, Mass. delivered a lecture on 'Emulation as a Motive to Exertion in Schools.'

At half past 11, Rev. G. B. Perry, of Bradford, Mass. gave a lecture on 'Primary Education'

At 1 o'clock the Institute came to order for the transaction of business — Mr Johnson in the chair.

Voted, That Mr Titcomb be excused, at his own request, from serving on the committee to report, &c. Mr H. Carter, of Boston, was appointed in his place.

The Institute then proceeded to ballot for its officers for the coming year, and the following gentlemen were elected. (The list of officers is inserted at the end of the volume.)

The following resolution was offered by Mr Woodbridge, and passed.

Resolved, That the Institute having learned the decease of one of their Counsellors, the Rev. Joseph Emerson, the Corresponding Secretary be requested to express to his family, the

high estimation in which they hold his memory, and the sympathy of the members in the heavy loss they have sustained.

The following was offered by Mr J. G. Carter, and passed.

Resolved, That the American Institute of Instruction entertain the highest respect for their late President, Dr Wayland, and the deepest gratitude to him for his early, continued and efficient efforts, to promote the objects of the association. And while they regret that they are to be deprived of his services as a presiding officer, they confidently rely upon his future co-operation in promoting the great objects of the society, which he has contributed so essentially to place before them.

Adjourned a few minutes before 2 o'clock.

Friday Afternoon, Aug. 23.

The Institute came to order at 3 o'clock, Mr. J. G. Carter in the chair.

There being no business before the Institute, a recess of twenty minutes was voted.

At half past 3, a lecture was given on 'The best Method of Teaching the *Ancient Languages*,' by Professor Alpheus S. Packard, of Bowdoin College.

At 5 o'clock, an animated and highly interesting discussion was held before a very numerous audience, on 'The Importance of Phrenology to a Teacher.' Dr Barber, of Cambridge, opened the discussion, with a long and able argument in support of Phrenology as a science — Mr Woodbridge followed — offering a few objections, rather playfully than otherwise.

Mr Johnson, of Philadelphia, urged the claims of Phrenology in a few pertinent remarks. He was followed by Mr Greenleaf, of Bradford Academy, who very briefly expressed his total unbelief in the supposed discoveries of Dr's Gall and Spurzheim. Mr Denny of New York followed on the same side. The discussion was continued by Mr Duncan of Cambridge, in the affirmative. Dr Barber, with great animation and unhesitating confidence that he was on the side of truth, occupied the remaining time, till the going down of the sun.

When, on motion of Mr Mackintosh, the Committee of Arrangements were requested to assign an hour, during the session

of the Institute, for resuming the discussion, now, by the lateness of the hour, necessarily suspended.

Adjourned to meet to-morrow morning, half past 8.

A. W. PIKE, *Rec. Sec'ry.*

Saturday, Aug. 24, 1833.

The Institute came to order at half past 9 o'clock, one hour after the standing hour for meeting.

Mr Sullivan in the chair.

Doings of the previous day read.

After remarks made by several members, in relation to requesting Mr Worster, now in the city, to favor the Institute with some suggestions upon teaching penmanship, and an exhibition of specimens,

Voted, That the subject be referred to the Committee of Arrangements.

The Report of the Directors was read by Mr Sullivan.

Voted, That the Report be accepted, and the board of Directors be requested to cause the same to be published in the next volume of transactions of the Institute.

Voted, That the names of the members, their residence and occupation, be appended, by the Directors, to the next volume published by the Institute.

At 10 o'clock, Dr E. Reynolds of Boston, gave a Lecture on 'The Importance to Parents and Teachers of a Knowledge of Human Physiology.'

At half past 11, an address was read by Mr W. C. Woodbridge of Boston, on the Juvenile Population of the United States requiring instruction; after the address, the report of the proceedings of the American School Agents' Society, and a statement of facts in relation to the state of education in several States of the Union, collected by them during the last year, was read by Mr Hall of Andover, assisted by Mr Woodbridge.

Adjourned.

Saturday Afternoon, Aug. 24.

At 3 o'clock the Institute met according to adjournment.

Mr J. G. Carter in the chair.

No business. A recess of twenty minutes.

At half past 3, Mr MULKEY of Alabama exhibited to the Institute, his method of teaching *Orthoepy*, accompanied by illustrations, by a class of boys who had been under his instruction a week or two.

On motion of Mr BURNHAM of Maine, the thanks of the Institute were presented Mr MULKEY for favoring the Institute with an exhibition of his method of teaching Orthoepy.

At 5 o'clock a discussion took place on the following question: 'In what manner can the evils of too long confinement in the school-room be prevented?'

The discussion was conducted by Dr ALCOTT, Messrs CARTER, HOLBROOK and RYDER, of Boston; Mr CLEAVELAND of Dummer Academy, Mr SPEAR of Roxbury, Mr EDDY of Connecticut, and the venerable Mr WOODBRIDGE, who commenced his remarks by observing, that he had been engaged in the business of instructing, more years, probably, than any one present, excepting himself, had lived. He is a veteran of fifty years' active service, and was listened to with no ordinary measure of interest.

At the close of the discussion, which continued about an hour and a half, the Institute adjourned to meet on Monday morning at half past 8 o'clock.

A. W. PIKE, *Rec. Sec'ry.*

Monday Morning, Aug. 26, 1833.

Institute met at half past 8 A. M., Mr J. G. CARTER in the chair.

Minutes of Saturday read.

One quarter before 9 o'clock, Mr WORSTER, teacher of Penmanship, gave an extemporaneous lecture on his method of teaching Chirography, (Carstair's system,) accompanied with illustrations on the black board.

Moved by Mr RYDER, and voted by the Institute, that the thanks of the same be presented Mr WORSTER for his lecture on teaching the art of Writing.

At 10 o'clock, Mr GEORGE W. GREENE of Providence, lectured on the 'Method of Jacotot.'

At half past 11, Prof. HALE of Dartmouth college gave a lec-

ture on 'The best Mode of Teaching Natural Philosophy,' after which the Institute came to order for the transaction of business, Mr J. G. CARTER in the chair.

On motion of Mr JOHNSON of Philadelphia,

Resolved, That the Censors be requested to adopt the most probable means to bring forward the volume of the doings of the Institute, for the current year, as early as may be practicable.

A letter having been received from the Recording Secretary of the Boston Academy of Music, with 150 copies of their first Annual Report. for gratuitous distribution among the members of the Institute,

A committee of five was requested to distribute the same, which was done accordingly.

On motion of Mr CLARK of Providence,

Voted, That the thanks of the Institute be presented to the Committee of the School 'Agents' Society, for the statement of facts in relation to the state of education in several of the States of the Union, made before the Institute on Saturday, A. M., the 24th instant.

Adjourned twenty minutes past 1 o'clock.

Monday Afternoon, Aug. 26.

At 3 o'clock the Institute came to order.

Mr J. G. CARTER in the chair.

No business done. A recess of twenty minutes.

At half past 3 o'clock, a lecture was delivered by Mr H. R. CLEAVELAND of Cambridge, on 'The Importance of a Knowledge of Ancient Art, to those engaged in the Higher Departments of Classical Instruction.'

At half past 4 o'clock, a discussion was held on 'The expediency of Bodily Punishment in Schools,' opened by Mr RYDER of Boston, who was followed by Messrs WOODBRIDGE (senior,) and TITCOMB of Boston, and Mr HALL of Andover.

The hour to which this question was restricted, (5 o'clock,) having arrived, it was moved by MR JOHNSON, that the question be laid on the table, to be taken up at the pleasure of the Institute; which motion was adopted.

The discussion on Phrenology was then resumed.

Mr SPEAR of Roxbury commencing on the side of Phrenology, followed by Dr BARBER in a single word or two of explanation.

Mr JOHNSON, from the chair, for the benefit of the audience and as a hint to the disputants, stated definitely the subject before the Institute.

Dr G. BRADFORD of Boston, then spoke at some length in opposition to the pretensions of the Phrenologist. Dr BARBER followed, not at all troubled by the arguments of his learned opponent. Mr CAPEN of Boston, and Mr JOHNSON, also participated in the discussion.

At 7 o'clock the Institute adjourned.

A. W. PIKE, *Rec. Sec'ry.*

Tuesday Morning, Aug. 27, 1833.

The Institute met at half past 9 o'clock, Mr JOHNSON in the chair.

On motion of Mr J. G. CARTER,

Voted, That the thanks of the Institute be presented to the Boston Academy of Music for their kindness in sending 150 copies of their first Annual Report, for distribution to the members of the Institute.

The discussion on 'The expediency of Bodily Punishment, &c,' was resumed and sustained by Mr KIMBALL, of Needham, and Mr RYDER.

At 10 o'clock, Mr W. C. WOODBRIDGE, of Boston, gave a lecture on 'The best Modes of Teaching Geography.'

At half past 11, a lecture was delivered by Mr A. R. BAKER, of Andover, on 'Mental Philosophy, applied to Instruction.'

Adjourned.

Tuesday Afternoon, Aug. 27.

At twenty minutes past 3 o'clock the Institute came to order, Mr JOHNSON in the chair.

At half past 3, Dr BARBER, of Cambridge, lectured (extempore) on *Elocution.*

After the lecture the discussion on Phrenology was resumed, and conducted with much spirit by Drs BRADFORD and BARBER, Rev. Mr PIERPONT, of Boston, and Mr DUNCAN, of Cambridge.

The audience was numerous and deeply interested for about two hours, when the discussion was brought to a close.

On motion of Mr SPEAR, of Roxbury,

Resolved, That the American Institute of Instruction entertain the most grateful recollection of the faithful and efficient services of their late Recording Secretary, and deeply regret both the circumstances of his resignation, and the painful cause assigned for it.*

On motion of Mr MACKINTOSH, of Boston,

Resolved, That the thanks of the Institute be given to those gentlemen, who have favored the Institute with lectures during its present session.

On motion of Mr BURNHAM, of Maine,

Voted, That the thanks of the Institute be tendered to the Legislature for the use of the hall, during its session.

On motion of Mr W. C. WOODBRIDGE, the thanks of the Institute were presented to Drs BARBER and BRADFORD, for favoring the Institute with their views on Phrenology.

On motion of Mr RYDER,

Resolved, That, as friends to education, we have reason to rejoice at the appearance of the continued interest manifested by the community, in the objects of the Institute, and at the new proofs, that this Society will exert a happy influence upon the cause of Instruction.

After a few parting remarks from the chair, the Institute adjourned *sine die*.

ALFRED W. PIKE, *Rec. Sec'ry.*

* Mr Durgin was affected with a pulmonary complaint. He has since deceased.

REPORT TO THE INSTITUTE.

Anniversary meeting of the American Institute of Instruction, August, 1833.

The fifth article of the Constitution provides that the Board of Directors shall make a Report to the Institute at its annual meeting.

From the absence of some members of the Board, and from declining health of the Secretary, such Report has not been prepared. The records of the Board have been examined by order of the Directors, and it appears therefrom, that the duties of the Board have been performed, and that all proper measures have been taken to promote the objects of the Institute, so far as such responsibility rests on that Board.

It is not perceived that it would be useful to set forth the course of proceedings, as the records can be resorted to, if there should be occasion for further knowledge of them.

It appears that the Institute have a convenient, well furnished room in School-street, near Washington-street; in which there are some books as the beginning of a library. The sum of one hundred dollars was placed at the disposal of the Curators in January, 1832, for the purchase of books. In their Report of August 10, 1833, it is stated, that thirtyfour dollars of this sum had been expended 'for some of the best books on the philosophy of mind' — and such other works as could be found in this country, containing treatises, hints, or suggestions on education; and that the balance would be required for the payment of bills, for reviews, and literary publications. The Curators also state

that copies of some works have been presented to the Institute by authors and publishers.

It also appears that the monied means of the Institute are derived from two sources: 1st, the annual assessment which each member pays; 2d, the sale of tickets.

The present Treasurer, Mr R. B. Carter, has presented a statement, from which it appears, that the balance in the Treasury on the 22d August, 1833, was $272 51

And that there had been received from annual assessments and tickets sold, 210 00

$482 51

That the payments made on the Finance Committee's order amount to $168 96

Balance in Treasurer's hands, 313 55

$482 51

The Treasurer is of opinion, that the amount received from the sale of tickets, is about $100 of the above-mentioned $210.

It is stated in a communication from the Corresponding Secretary, Mr W. C. Woodbridge, that the Institute could not find publishers for the lectures, who would pay for the privilege of publishing, nor who would furnish copies as pay for this privilege. The same communication makes known the mode in which the publication of the lectures has been effected. As this subject may more properly come within the consideration of the Directors, it is not supposed to be material to go more into detail before the Institute.

At this *fourth* anniversary of the American Institute of Instruction, there has been time enough since the beginning to form some opinion of its usefulness and general estimation. There is abundant reason to believe that it has been extensively useful, and that it is well esteemed. The mere congregation of many instructors, male and female, for the purpose of seeing, hearing, and communing, on subjects equally interesting to all of them, is in itself reason enough for sustaining the Institute. Thoughts, feelings and acts, however excellent, if known only in seclusion, fail to produce the social benefit which the common good requires; communicated and diffused, their value

augments in proportion to the number of minds to which they are known. But there is a greater benefit derived from the Institute. Persons who are invited, long before the annual meeting, to turn their attention to some important inquiry, or discussion, will, from self-respect and duty, come to the meeting prepared with the result of reflections which they would probably not have tasked themselves to arrive at, without such stimulus. The Institute is thus favored with the best exertion of the mind, for the common good. Such stimulus is a powerful one in all minds, alive to the truth, that all the elements of the social refinement now known, originated in some one mind; and that each one of these elements could only produce its effect by diffusion and adoption. This Institute offers a field for usefulness and for honorable ambition, which capable and benevolent men ought not to undervalue, when invited to appear in it.

On the whole, there is no reason to be discouraged; but on the contrary, there is every reason to be satisfied with the past, and to persevere, with cheerfulness, in relation to the future.

By order of the Board of Directors.

Wm. Sullivan.

INTRODUCTORY LECTURE.

BY

WILLIAM SULLIVAN.

INTRODUCTORY LECTURE.

It is believed, that the members of an Association are now addressed, whose chief object in associating was, to devote their united efforts to making the members of society as intelligent and happy as they can be. I have, therefore, supposed, that if I am capable of performing the service implied in accepting the honor conferred on me, I could not do it more usefully, than by showing, as well as my humble means will permit, how intelligence and happiness may be promoted.

As the words *intelligence* and *happiness* may have different meanings, in different minds, it may be proper, first, to explain the sense in which they are used on this occasion. Intelligence, in its most comprehensive sense, may mean all the knowledge which the human mind can attain to. But as it is, for the present purpose, to be used in reference to all the members of society, it is used as meaning that information which each member should have in the station which he may hold, whether it be public, or private; prominent, or humble. Every one, of whatever station, has rights and duties. If he conduct himself well and usefully to himself, and others, in all his relations, he may be entitled to be considered intelligent; if he conduct himself perversely, or ignorantly, and make a

bad use of life for himself; and is a cause of trouble and vexation to others, he cannot be so considered. Intelligence, then, implies knowledge of motives, means, and ends, to good purposes. One may be adroit, cunning, and fraudulent, and may well understand how to accomplish bad purposes; but he should not be called intelligent, since he either knows not what life was given for, or he foolishly misapplies the gift.

The word happiness will be used, on this occasion, as meaning freedom from bodily pain, from self-reproaching retrospect, and from disquieting apprehensions of the future; and the enjoyment of all pleasures which occasion no suffering, penitence, or regret.

If these words be so understood, one need not hesitate to say, that the American people are very far from being as intelligent, and as happy, as they might be. With respect to those of them who have made much progress in adult age, their opinions and habits, if essentially wrong, are not likely to be changed for the better, by any course of instruction. If there be room for improvement, we must devote our services to the young. In the present, and probable condition of the American people, children are an object of intense interest to every person, who is capable of rightly understanding, and duly estimating the means of individual, domestic, social, and political happiness. We who are now beyond the middle age of life, ought not to forget, in what a little moment, they who are now children will occupy our vacated stations. Nor ought we to forget, that if we wish well to them, and hope to be favorably remembered, we have some sober duties to perform while the sand of the hour-glass still continues to run. Every patriotic and benevolent man should feel, that he lives in the long past, in the active present, and in the far-coming future. He is, what those who went before him, have made him to be; those who are coming, will be what he, and his co-agents, make of them. Society may be likened to a long flowing river.

Some parts are continually mingling with the insatiable ocean; others, disappear by early evaporation; while other parts are continually coming in from fountains, and tributary streams. If these renewals of the ceaseless river be turgid, unhealthy, and noxious, surely the whole extent of the gathered waters, must soon have the same character.

In treating of the proper course of public instruction, in our country, it must be remembered, we have proudly declared to the world, that we need no kings, no lords, no military force to govern us; that we can make, and can live, under our own laws, peaceably administered by rulers of our own choosing; that we need no established priesthood, no creeds of human invention; but that we can, and will, worship the Creator in sincerity and truth, under the guidance of pure and enlightened teachers of our own selection.

This is glorious freedom; and worth all the precious treasure, and noble daring, which it cost. But, what has been obtained? *Nothing but the power to act.* The talent has been confided to us. Shall we use it, or hide it in a napkin? Shall we do far worse with it; shall we prove ourselves unworthy of the trust, and purchase for ourselves the just charge of ingratitude to predecessors, and the contempt of followers? Whoever will look into the future of this great and increasing country, even for a few years, with an eye prepared for the inspection, by having observed human nature, as it has hitherto shown itself in the history of the world, will be startled into the inquiry, *what are the duties of the age in which I live; and what are my own duties?*

In the aspect of the present, there are two facts, which will force themselves on the notice of any observing mind; the one is, that with all our liberty to act as we please, for our own good, we are far from having the benefits which education can impart; and the other is, that we are in danger of losing the good we now have. If education be designed to make the

members of society intelligent and happy, how does it happen, that after all that has been accomplished, this is still a painstaking, anxious, and troublesome world, to little purpose, among a large proportion of all who dwell in it? Why is it so; and what is to be done to make existence better?

Whatsoever answers my limited means permit me to give to such questions, will be found in an attempt to answer another question, *In what manner should an American youth be educated?*

This is a question, in which a small portion of the busy and active members of society, consider themselves to be interested. If one can find satisfactory excuses for his neutrality, in all matters relating to the welfare of his fellow-men, he does not deserve the privilege, and the honor, of being an American citizen, if he is resolved to take no part, nor interest, in the instruction of the young.

It is supposed that the proper education of an American youth, may comprise; 1. whatsoever pertains to his person, as an animal being; 2d. whatsoever belongs to the development and use of his understanding; 3d. whatsoever belongs to his motives, and to the object of all the acts, which he may justly do; 4th. whatsoever is involved in the duties of a citizen, in a free popular government.

The mere animal enjoyment of life, is far from being well understood in this country. This subject better deserves an appropriate treatise, than a short remark, which is all that this occasion allows. In this respect, we might be, with our abundant means, far more intelligent and happy than we are. If those benevolent persons who give a portion of their time to teaching in Lyceums, would discourse on the common-sense practical philosophy of life, they would do far more good than they can do by discoursing, ever so wisely, on poetry, astronomy, rail-roads, and steam-engines. How to eat, how to sleep, how to labor, what air to breathe, how to be dressed, and how

to be cleanly, concern every man, woman, and child; for all these go to health, without which intellectual pleasures are of little worth.

It is believed that there are lasting and painful infirmities, which begin in the school-room. It is a convenience, and a relief, to a busy mother, to send her children to school, for several hours in the day. She considers them safe while so employed; nor only so, they are getting learning, and preparing to get a living. But at this tender age, while the bones are hardening, and the delicate structure of the human frame is easily deranged, it is more than probable, that long continued *sitting*, lays the foundation for diseases which show themselves in after life, and occasion affliction to the child, and cost and pain to parents. The learning that may be acquired, in these early years, can be no compensation for such evils. It would be far better, for parent and child, to have good schools for *playing*, as well as learning, during the early years of infancy. The natural athletic action of the human system, has no tendency to deform, or enfeeble it; while the tedious confinement of the school-room is certain to do both. All that is contended for, is, that there should be a rational intermixture of bodily action, and mental employment for children, as mutually auxiliary in preserving health, and in acquiring learning; and however common such thoughts may be, they cannot be too often expressed until they are carried into practical and general effect.

Of the schools which come next to those for the very young, I have no information, or experience, in teaching, or discipline, which would justify me in expressing any opinions. It would seem reasonable, as learning may be so useful, profitable, and pleasant, that all associations with the means of acquiring it, should be made as pleasant as they can be. And this, not only for the happiness of childhood, but to induce the pursuit of information, as a benefit, and not as a task, in more ad-

vanced years. It is well known to some who are present, that many years ago, the recollections of *school years* were as little pleasant as any in the course of life. It may be, and it is believed to be, far different now; and that the lesson and the birch, are not now, as formerly, familiar associates. It is seen, that experienced and intelligent minds are busy in discerning and applying the best means of stimulating young minds, to use and develope their powers. It remains perhaps to be proved, by repeated experiments, whether kind treatment, persuasion, familiar conversation, occasional explanation, and rewards, are the best stimulants to intellectual exertion, or whether the preceptor must be despotic, in his own little empire, to make good scholars. Such matters must be referred to the decision of the humane, and experienced, in the difficult duty of unfolding the very varied and even strongly contrasted capacities of early age.

The establishment of schools uniting intellectual pursuits, and mechanical labor, is said, by some judicious persons, to be an object which deserves the immediate attention of our community. This can be effected but in one of three modes, as it involves considerable expense. It must be done by generous donations, by investment made with a view to gaining a revenue from it, or by appropriation of public money by the legislature. When the powers which have been given by the people to the law making authority, really embracing, as they do, every thing which ought to be done for the public welfare, are taken into view, it would seem, especially in this state, that much less is done, than might be. It is to be hoped that it will be discerned, how profitably and honorably the legislative power might be exercised for the promotion of intelligence; and that it will be an admitted truth, and practically applied, that whatsoever Americans have, that is worth having, will be worth still more, from the diffusion of knowledge.

If this spirit should be found to influence the public councils

of this and other states, it is probable, that another public improvement may be expected. There is a space to be filled, one would think, between the common school and colleges. Academies, in part, occupy this space for females. But there is a numerous class, who constitute the strength of society, engaged in agriculture, mechanical, and other employments. On this class, no small portion of individual and general prosperity, essentially depends. They become, in the usual course of affairs, jurymen, town-officers, legislators, referees, executors, administrators, and members of many associations. The common school does not furnish this class with the full instruction which it would be convenient and useful for them to have, as well for themselves, as in a public view. Collegiate education is not desired by them, nor attainable, consistently with their engagements. In general, they are sufficiently ambitious to desire, and successful in obtaining, the information they need. If the sphere of the common schools were enlarged, or some appropriate seminary were established, so as to meet what are supposed to be wants, among this portion of our citizens, it would be a proper and useful improvement in general education.

Admit that all our schools, as they now exist, and all others which have been mentioned, if established, answered the purposes intended, they would only qualify young persons to commence the getting of a living, and to acquire property, as though the sole purpose of this life were to get, and to use, to keep, and die possessed of, such things as can be weighed, measured and counted, or valued by money. It is not perceived, that it makes any part of the course of education, to teach *how to live, or for what to live.* Is it wise or consistent with human capacity, to limit education to the mere purpose of getting this world's goods, and to exclude all instruction as to the uses to which they should be applied, and as to their true value in comparison with other attainments? It is not assumed

that property is, in general, misused among us, nor intended that the honorable industry which is enriching this country, should be laid aside or interrupted. No doubt this industry is conclusive proof of national welfare, as far as it goes. It is the source of the noble charities of which our citizens may be justly proud, since nearly all of these come from private donations, and not from the public chest. Passing by many cases, which might be mentioned, we may select, with pride and pleasure, the recent munificence of one of our citizens, in aiding to bestow a new sense on those whom nature seems to have neglected, and to restore a sense to those whom misfortune has bereaved.* Such sensibility to the wants of others, sheds a glorious lustre on our land. It is not contended, that the manner in which property is acquired, or used, is wrong, but that the education which qualifies one for no more than to acquire property, merely for its own sake, is not that education which qualifies any human being to be intelligent and happy. For, let it be supposed that young men are as well instructed as they now can be, in our schools and seminaries, that agriculture is well understood, and that every acre of ground is as well cultivated as it can be; that the public roads are as good as they can be; and that rail-roads and canals exist, wherever they can be profitably used; that all the mill power in the country is well applied; that foreign commerce is prosperous; and every sort of industry as productive, as free competition will allow. Let us also suppose, that we frequently hear of obscure villages becoming important towns, and

* The gift of the Honorable THOMAS H. PERKINS, of an estate in Pearl Street, Boston, valued at thirty thousand dollars, as an Asylum for the Blind. Fifty thousand dollars were contributed, within sixty days, to constitute a fund for the same object. This is but one of the many similar instances of this gentleman's use of money, who seems to understand the important distinction between being *almoner* for one's self, and leaving charitable appropriations to the ministry of executors and trustees.

inconsiderable towns, populous cities. Let us assume correspondent comforts, conveniences and luxuries; that population is everywhere increasing; that the interests of learning are attended to; that pauperism is diminished; intemperance suppressed; and crime of rare occurrence. This would be considered a picture of brilliant national prosperity. Could anything more be asked for in this life, and what people could be more substantially blessed?

At this day, the people of the United States are not afar off from the reality of this picture. And yet in the absence of all sickness and bodily infirmities, how many grievous heart-aches are there in this seemingly happy land. How much misery in the cities; how much mental suffering in every town and village. How many toiling after what they cannot gain, and ought not to gain if they could; and which would be found dissatisfying and empty, if success were sure to follow effort. How many are there who have festering troubles at the heart, which they keep to themselves, or trust only to the confidence of tried and mutual friendship. How many are there, surrounded with all that seems essential to happy life, and who are really objects of envy, who, nevertheless, feel that this is a sad and wearisome world, and not worth coming into for the good it gives, however reluctant they may be to leave it. If these things be so, are they ordained so to be, by man's Creator; or do they arise from some other cause? One would be slow to believe, that the Author of this well ordered and beautiful universe, and of the human mind, and of the power and interest to use it for the best purposes, has made such a state of things unavoidable, at all events, to the best condition of the human race. It seems more probable that we are at fault, and that we have not yet made all the progress towards a happy earthly life, of which we are capable.

Shall one venture to say, in such an assembly as this, that our systems of education are essentially defective? The

supposed defect does not lie in the want of such instruction as enables the members of society to get a living, and to acquire property; but in this, that it is not adapted to make life as happy as it might be. If we glance over the attainments derived from education, it is believed, that the supposed defect will appear. Reading, writing, and arithmetic, are universally deemed to be essential. The common business of society could not go on without these. But the most accomplished persons in these attainments are quite as likely as those who know nothing of them, to find this a very troublesome sort of world.

Then something more is needed than this sort of schooling, to make this a comfortable and pleasing state of being. Add, then, the most accurate knowledge of grammar, of geography, of history, of mathematics, of natural philosophy; add, also, as many languages as one can master, and to these add the skill which entitles one to highest distinction in some one of the departments of industry, whether mechanical, scientific, or professional. Add to these voluntary unbought suffrage, to the highest stations, and to all these attainments, good health. So qualified, so gifted, and so fortunate, why should not one be at ease, and in happiness? Let us sound the heart of any one who comes nearest to all this, and hearken to the response. Does any one doubt what it will be? How near will it come to this: 'Tis a troublesome, and a weary world to live in; full of disappointments, vexations, and sorrows! Such dissatisfied man, it may be said, has not been disciplined in philosophy; he ought to know, that it is such a world as he takes it to be, and that the Creator meant it should be so; and that he should live in it accordingly. Or, he does not understand the world, and knows not how to live in it. Then furnish him with philosophy, and make him wise in the use of it. Let him have the best sort which the wisest minds of Greece, in its most splendid age could furnish. This was the creed of one of the best classes of that age. 'Pleasure, or pain, is the measure of what is

good, or evil, in every object of desire, or aversion. However, pleasure ought not in every instance, to be pursued, nor pain avoided; but reason is to compare, and distinguish, the nature and degree of each, that the result may be a wise choice of what may appear to be, on the whole, good. That pleasure is the first good, appears from the inclination which every animal, from its first birth discovers, to pursue pleasure, and avoid pain; and is confirmed by the universal experience of mankind, who are excited to action on no other principle than the desire of avoiding pain, and obtaining pleasure. Pleasure is of two kinds: one consisting in a state of rest, in which body and mind are free from pain; the other arising from an agreeable agitation of the senses, producing a correspondent emotion in the soul. Upon the former of these, the enjoyment of life chiefly depends. Happiness may, therefore, be said to consist in bodily ease, and mental tranquillity. It is the office of reason to confine the pursuit of pleasure within the limits of nature, so as to attain this happy state, which neither resembles a standing pool, nor a rapid torrent, but is like a gentle stream, that glides smoothly and silently along.'

This may have been very good philosophy for its time. But even then it could have been applied only to one man in many thousands. It could not have had any application to laborers, warriors, poets, painters, sculptors, and ambitious politicians, any more than it now applies to farmers, manufacturers, merchants, lawyers, divines, physicians, political partizans, and patriots. The day is gone by, in which happiness is found solely in bodily ease, and mental tranquillity. These are inconsistent with the modern action of the world. For without action, no man will pretend that there can be any approach to happiness. This philosophy places the highest happiness in idleness. Modern experience shows, that inaction is man's most intolerable state. Certainly, then, in our busy country, philosophy has no tendency to console one for the burthens,

vexations and the distresses of life. It seems necessary, therefore, to find something better than the best philosophy of the Greeks, out of which to make human life pleasant.

As man is left to act as he sees fit, and has proved himself capable of bettering his condition, through all the long distance which lies between barbarism, and his present advancement, it seems reasonable to believe, that he may go still further; and that all the troubles which he experiences (except in the operation of the general laws of nature) arise from his own ignorance, or perversion. This is the more probable, because there is no want of rules for the action of human life, nor doubt of their soundness, authority, or sanction. The error lies, it is believed, in some deficiency in impressing these rules on youthful minds. We tell a youth what a wicked world it is, and how many wicked people there are in it, and we terrify him with distant and unintelligible punishments. We do not teach him the beauty, the excellence, and fitness of virtue, to make this a pleasant life. Probably not one youth in a hundred has any such systematic teaching how to attain to the best state of being, as he has in the art of getting money. Health and strength are the first objects, and it is surely a weakness to covet sympathy for the feebleness of the body. It is believed that no instruction is addressed to one's reason in early life, on the causes of losing, nor on the proper means of preserving, the bodily powers. The advantages of truth, justice, and industry are not brought within the notice of children, though they may be severely punished for falsehood, fraud, and idleness. The uses and the pleasures of prudence, humanity, benevolence, generosity, and sympathy, are not objects of instruction, though improvidence, selfishness, and meanness, may be sometimes chastised or reproached. The inestimable treasure of a pure and consoling conscience is a matter clearly within a child's comprehension; but of this he rarely hears, during all his childhood; while he is very sure to feel a vindic-

tive sorrow from being charged with guilt. The little extent to which moral teaching goes, seems to be, to tell a child of faults and crimes, to threaten the punishment of them, and to make a festering enmity in his heart, by executing the threat. It is not believed that there is a natural propensity to evil in children, which must be whipped out of them. It is far more probable, that most children may, by kindness, gentleness, and persuasion, be made to comprehend the beauty and utility of a natural and pure morality. It is far more probable that children can be made so to comprehend, than that adults can, who commonly first hear that there may be such things, after they have been steeped in worldly experience. Should a child be told before hand, that he can do wrong; and when he does wrong, would not the best correction be to make him fully comprehend the advantages of doing right? Suppose that all the members of society were so instructed in the real good of doing right, that they spoke only the truth, and were temperate, just, benevolent, forbearing, kind-hearted, and industrious, would society come to an end? Suppose the desired things of this life, and the objects of distinction, now so zealously pursued, were justly and not vainly and foolishly estimated, would the inducements to productive industry cease? Suppose that all the members of society had learned in infancy that they would promote their own interest in being sincere in acts, and professions, would the courtesies, and charms of society be abolished? Suppose it were inculcated in the minds of the young that if they desire to be ever at peace with themselves, they must consider before they act, and avoid every act which will bring self-reproach; would they be disqualified, by such lessons, to mingle in the affairs of the world?

What the answers to these, and similar questions, must be, no reasonable person can doubt. It must be remembered too, that such morality, as these questions imply, does not depend on Grecian philosophy, nor on any human dictation, but comes

from high and awful authority. Will it ever come to be the case, that education will elevate, even a majority of human minds, to know how to derive the greatest good from using external objects; how to practise the best rules of life, as to one's self, and others; or how to insure a calm, dignified self-respect under all circumstances; or how to attain to a sincere conviction, that whatsoever concerns physical, moral, or intellectual being, refers, necessarily, to the will of a Creator; and that nothing wrong can happen among them, when they are not wrong themselves? We are not to despair that it will, at some time come to this, however distant from it society appears now to be.

It may be expected, that when one ventures to assume that society is in error, and can become wiser, that he should point out the cause of error, and suggest the remedy. I have but light pretensions to be able to do this. So far as I can see into this matter, it arises from the general prevalence of unsound opinions, as to worldly good; and from the habit into which the members of society have fallen, of making *comparisons* between their own condition, and that of others. One, for example, has little satisfaction in a keen appetite, simple food, good clean raiment, a moderate and comfortable dwelling-place, furnished for usefulness and not for show, and in safe and convenient means of transportation from place to place, nor even in good health, when he is obliged to compare himself with one who dwells in a splendid mansion, adorned with pictures and statues, and who dines at a table dazzling with porcelain, silver, and gold, and on food which it has tortured ingenuity to prepare for him; and who rides on yielding springs, seated on downy cushions. But the person who distresses himself in comparing his condition with that of his fortunate and luxurious neighbor, would be astonished to hear, that his neighbor is envying him for his supposed freedom from vexatious care, for his tranquil industry, and well

earned health. It does not seem to be the possession of riches, nor every use, nor even the most common use of them, which constitutes happiness.

For, after the common wants of nature are satisfied, if the rich have no inclination to use money for charitable purposes, or the public benefit, the pleasure of being rich must be derived from the consciousness of being thought, by the world, to be so. The real value of wealth may be tested by comparing it with knowledge. Lord Bacon, or some other wise man, says that knowledge is power. Wealth cannot buy health, but can easily lead to disease. It cannot buy knowledge, good sense, taste, good manners, or good feelings, but may, and often does, prevent the acquisition of all of them. It cannot purchase self-satisfaction, or tranquillity, but often makes one dissatisfied and painfully anxious. It does not make one independent, but often makes one a miserable slave. If a miracle could be wrought in relation to a sensible, well informed man, and a rich one, who values himself only on his riches, the true value of wealth would be discerned. Suppose two such men could remain precisely in their respective conditions, as to possession and use of worldly things, but that the eyes, and ears, and tongues of the world, should become insensible as to both of them. The rich man's house would be seen, but he would not be known to be the possessor. His festivals would occur, but he would not be known to give them. His equipage would continue to glitter, but be would not be known to be the fortunate owner. He would come to the sad conclusion, that he spends his life for others, and does not live for himself. While the other man would still have his own sources of satisfaction, and come to the sound conclusion, that the world's admiration is of no worth to him. But this is not the worst of selfish wealth. One's children are necessarily habituated to consider, that the business of this life, and all that life is given for, is to be rich. They receive no instruction

which qualifies them to know how riches should be used. If they inherit, and become afterwards poor, they are in a miserable state, compared with a poor man's child, who thinks it no degradation, but a privilege, to labor in any honest vocation. There are some who think the statute of distributions is an unwise provision; it tends, they say, *to break families down in three or four generations.* So far from being wrong, this is the very best feature in our whole system of policy. If wealth could be entailed, in such a country as this, while education continues as it is, all the inducements to be intelligent and happy would disappear from the land. The less that is thought of wealth, for its own sake, and the more that is thought of those qualities which no wealth can purchase, the better pretensions will Americans have to intelligence and happiness.

And as to other distinctions, as beauty, grace, talent of any order, eloquence, learning, ancestry, these would be of very insignificant value to the possessors, if they were deprived of the pleasure of comparing themselves with others; and of the still higher pleasure of believing, that others regard such distinctions as proofs of happiness. And so with regard to official distinction.

The office of President of the United States may disclose to us, how it may be in many other offices, which are not sought, and taken merely to get one's daily bread. Suppose we could certainly know the pains and the pleasures which are supposed to be experienced by one who holds the office of President. Take away from him all the pleasure of knowing that he stands on a pedestal, which no one, in his whole nation, can ascend while he stands there; and that the eyes of the world are turned to him in envy, or admiration. Bereft of this pleasure, there would be but a light balance of pleasure to console him for his anxious, perplexing, wearisome, and disgusting existence.

Are we, then, to assume that in a country whose affairs must

be conducted by elected officers, there will be no inducement to take office but that of making comparisons? The number of genuine patriots who get into office and hang on to it, and quarrel for it, to the imminent hazard of ingulphing our national bark and sinking it to the bottom, leaves no room for doubt, as to inducements. Passing by these hungry, craving hosts, who prefer precarious feeding on the public, to private independence, there have been men in our land, whose ample souls were too full of dignity, and duty, to leave any space for the entry of the poor vanity of comparison. Of such men were Washington, and John Jay. They acted towards their fellow-men, throughout their lives, knowing that they were ever in the presence of a Judge, whose wrathful indignation they never feared, nor thought of; but the consciousness of whose approbation, (whatever men might do or think,) was that sentiment which ever made retrospect grateful, and the future cheerful; and which was abundant in pleasures that left no sting. It is hoped our nation will find out, that the race of such men has not come to an end.

Are we to annihilate or banish from private society one of the most powerful of motives to action? Is one to shut his eyes upon the condition of all around him, and expect of them to do the same towards him? This would be to put an end to social relations. Comparison-making is, in itself, rightly applied, the very salt of society. Suppose that all of us were to think of riches, and distinctions as they should be thought of; and should compare ourselves with each other in profitable intellectual attainments; in habits of useful industry; in the performance of the manifold obligations as members of society; and in all those virtues, and innocent accomplishments, which adorn domestic life, and shed a satisfying pleasure on social intercourse; suppose that our public men should compare themselves with each other, in patriotic intelligence, and in seeking for themselves that self-respect, and cheering complacency,

which they will earnestly desire, when the hour approaches for their final retrospect of life; and when one must think, what the living will do with the fame of the dead; why, then, if this were all so, comparison-making would be a very good thing, and this world would be relieved from no small portion of its griefs, and vexations, and become a reasonable, and satisfying place to live in.

But who can hope, in this thriving, money-making, comparison-making community, vieing in festivals, splendor, and show, that such fanciful notions can find entrance to any mind? Yet it is firmly believed, that whatsoever we do to promote common learning, and science, our duties demand of us still more urgently, to promote sound, rational, practical morality, among all the members of society; for without this we have no reason to hope for individual happiness, or national security.

If the true value of a cheerful, virtuous life, were seen in domestic precept, and example; if rational, moral teaching, conducted by gentleness and persuasion, and not by fear and terror, were found in all our seminaries, one would think the Americans might become a truly happy people, if such there can ever be. It is believed that if such teaching prevailed among us, there would not be so many sorrowful and mortifying lessons to learn after adult age has come over us. We should not waste our lives in the pursuit of objects, which cause bitter disappointments when not obtained, and which are found to be vain, and worthless, if obtained. We should not so often be distressed with the indiscretions and follies of others, nor find ourselves so often engaged in mourning over our own. We should not so often, as we now do, meet our fellowmen in business, in politics, and religion, with embittered feelings. We should not, as many are now fated to do, regard the desired gift of children, not as a cause of grateful emotion, but as a cause of inexpressible sadness. There would not be so many who daily wake to a depressing sense of present and

coming evils, known to be phantoms that vanish in the light of reason; but which still gather round one in the shades of night, and are again to be dispelled when morning comes. And when old age comes on, and the pathway seems overshadowed to the dim eye, and nothing is seen there to attract, and prompt one onward, we should tranquilly regard that which lies beyond its end, and not turn to cast 'a longing, lingering look' over the path that has been traced. He only has been well instructed, who can engage in this retrospect without painful emotions. Most men so engaged plainly see the good they have missed, but might have had. Most of them will be reminded of scenes, which ought to have been grateful as they passed, but which went by, little valued, and which can be known no more. Not a few trace the relics of lovely forms, and lovelier minds, of which the worth was unperceived, while they were familiar. There are some to whom these offices of memory are truly mournful, since they are strangers to the hope, that they shall know these forms, and minds, again, when they too, shall have passed away.

There is little doubt that the means of education now are, or soon will be, fully adequate, to teaching all that need be known to acquire property. If there should be any highly desirable advancement in the character of instruction, it will be to teach *how to live, and for what to live.* I pretend to no knowledge how this great end can be accomplished. But we ought to believe, that everything which ought to be done, can be done. If this end be thought a proper one to strive for, it may be expected that it will be accomplished, if anywhere, in a country where no ecclesiastical or political bondage is known; and where all its citizens are at liberty to effect any good which they may desire.

A people who have the right of self-government, have duties to perform as a *nation;* and however instructed in common, and in scientific learning, however rationally religious,

and purely moral, an American youth may be, he is defectively educated if he be ignorant of the political institutions of his own country, and of the rights and duties of a citizen. We see here, for the first time in the history of men, sovereignty universally diffused, and that sovereignty dependent, in the making and executing of laws, on universal suffrage.

By what means national perils, and sufferings can be averted, met, or remedied, and by what means the highest degree of security, and happiness, may be had in a nation, must depend on human agency to some extent. But the wisest agents, in the space of time in which they can exercise power, can rarely foresee all the consequences of the measures, which they may order, or accomplish.* It might be an instructive inquiry to Americans, who have far more power to order and accomplish, for their own good, than any people have ever had, to study the course of social action, and to learn how this has been over-ruled, by the power that can order, and accomplish, throughout the long series of ages. An example may be found in the question, what the fanatical warfare, which began with the thirteenth century, had to do, with the rational liberty and equality, which are now practically known to the people of the United States? The military genius, the powers of sovereignty, the physical force, and the riches of Europe were then suddenly devoted to the remote and impracticable purpose of expelling the Saracens from the Holy Land. This was a surprising change from the desolating feudal warfare, mingled with barbarous magnificence, and abject vassallage, which had constituted, for ages, the principal

* It is somewhere said, that civil government is only a course of expedients; each day bringing its own evils, which, in each day, must be remedied, if they can be; and that a statesman must content himself with doing this, if he can. But this ought not to be considered so, in this country.

elements of society. The *human* purpose, in this case, arose from a perverted and absurd sense of religious duty. The *Divine* purpose seems to have been, to change the condition of society, by giving new, and better objects of desire to the human mind. Among the unforeseen consequences of the Holy wars, as they are called, were more expanded views arising from the collisions of able minds, the enlightening and refining influences of commerce, the accidental discovery of the long forgotten, and still admirable code of Roman Law, and an ardent devotion to improving the human understanding. The paralyzing reign of the Roman Hierarchy was soon felt to be wrong, and oppressive. In this state of feeling, some men, and eminently so *Luther*, secured to themselves an enduring fame by showing the way to break from their allegiance to the Roman Church. Here the human purpose seems to have been no more, than to escape from one sort of creed and worship, to establish others, hardly preferable, and still under a despotism not less severe than that which was repelled. The Divine purpose seems to have been, however, unperceived by the agents of that day, still further to advance the knowledge of human power, duty, and welfare; and that out of the afflictive tyranny of these days, should arise, the satisfying conception, that men can govern themselves, in their own right; and that hereditary right to rule, is unnatural and absurd. Who they were who first so conceived, and by what wonderful patience, exertion, and perseverance, this truth has become the fundamental law of our country, is the honorable distinction of American history. It may be hoped that the Divine, and the human purpose, have in our case united, and that we shall be able to prove ourselves worthy of the trust which has been thus reposed in us.

It may be said, that the Divine and the human purpose, can never accord, since the one runs through all duration of time, while the latter must be limited to a generation, or even

to a day. Looking back through historical periods, this may seem to be so. Thus it may be asked, what human prescience could have given the intimation, that the present state of Europe might be, what it is now known to be; and if its liability to be, what it is, could have been discerned, what human wisdom could have made it otherwise? Could any one have foreseen, that what are called the triumphs of genius in glorious war, in science, in commerce, in manufacturing industry; or the proud honors of royalty, renowned ancestry, religious devotion, ecclesiastical dignity, and national grandeur, might, in any lapse of time, bring any nation to the verge of social dissolution, threatening to reduce all that ages have been cementing, to first elements, in a single convulsion? What a state of society must that be, in which hereditary claims, long accustomed habits, the interests, and the prejudices of priesthood, pride, character, craving want, accumulated riches, the sense of intolerable oppression, and brutal notions of liberty, are liable to mingle at any moment, in desolating conflict! Such condition may be consistent with the divine purpose, as some better condition may come from what seems to be appalling evil; and yet, who can doubt that if human wisdom, and just regard for the future, had been, heretofore, applied, that such would not have been the state of any European people.

Is there not something touchingly monitory to us, in the mournful prospects of Europe? We often hear short-sighted philanthropists boast of 'the march of mind,' as they call it, and of the coming reign of republican freedom. They seem not to know, what intelligence and virtue have to do with such freedom. They shut their eyes upon the convulsive experiments already made in Europe, which have ended, as all such experiments, (in the absence of virtue and intelligence,) must end, in the terrible tranquillizer of all commotions, the power of the strongest. There is monition for us, also, in the state

of South America, from which we have, by every arrival, some account of new political paroxysm; as though a party-colored, ignorant, priest-ridden population, could comprehend, and live in, republican freedom. There is still more touching monition in the state of our own country. One may almost ask, whether the experiment in republicanism, has not already failed with us; and if it has not, whether the day is not soon to come in which it must fail, if human purpose do not forthwith and wisely, pursue some other course than that to which it is now devoted.

What is that, in which the people of the United States consider themselves to be privileged, far above every other people; and to gain which a majority of all who dwell in Europe would gladly risk their lives? One knows not what it is, unless it be the right of choosing rulers from among equals. Yet, through this, which is not only a good thing politically, but the best political thing that can be, this country seems to be hurrying on to as deplorable a condition as any which is seen in Europe, or South America. How should it be otherwise? We go on, from generation to generation, as though a clear knowledge of the rights and duties of a free citizen, could be had, throughout our extensive country, by some sort of inspiration. We all know, every citizen is presumed to judge of public policy, and to be able, if it be wicked or unwise, to correct it, by exercising his electoral right. Yet, there is not one youth in a thousand, even among the best educated, who ever spent an hour in studying the principles of our political and social being. It will not be denied, that nearly all our children pass from minority into citizenship, and all its serious duties, without one word of instruction as to the nature of these duties, nor even that there are any such duties. If a youth observes at all what is passing in the political world, he only reads some speech, as a specimen of eloquence; or

notices some electioneering controversy, which must seem to him to be of much the same dignity as a combat among gladiators; and if the election involve some principle of constitutional law, or of vital expediency, these lie far beyond his perception. How should he have learned, that on the conscientious exercise of electoral right, depends the welfare of himself, of all around him, and of all who are to come after him? It never entered his head that a sacred trust will soon devolve on him, for which he will be held far more seriously accountable than he can be, for any other trust, which it may be in his power to assume.

If there be any among us who think they discern in the signs of the times, that this country is fast hastening under the dominion of factions, as audacious, and corrupt, as any ever known within the walls of Rome, surely they must feel that they have some duties to perform. If they can do nothing to arouse and inform adult age, grateful reverence to forefathers, affection for those who are of their own times, and faithfulness to coming generations, unitedly demand of them to do their best and utmost, to instruct and purify the young.

It is not supposed that education can be so universal, th at every citizen who is entitled to vote, will be profoundly versed in constitutional law, or public expediency. But a large majority may be sufficiently so; and we must depend, to some extent, on example, imitation, and sympathy.

It is as reasonable to suppose that such influences may have effect in morals, and public policy, as in the wearing of a watch chain, or the deforming fulness of a sleeve.

It is in vain to busy ourselves in bettering schools, if there be no teaching in good morals, and in the rational belief on which such morals rest; for learning, which is not chastened by such teaching, is more likely to be mischievous, than useful. Learning, however chastened, affords no assurance of happiness to a people who are so careless, or ignorant of their public

affairs, that they know not whether they are ruled by honest imbecility, or skilful dishonesty.

With all the benefits from instruction which we can in any way obtain, let us not deceive ourselves in supposing, that we shall be free from all embarrassments and perils, as a nation. All thoughtful men contemplate the future of this country with fearful emotions. They cannot be unmindful of the truth, that it requires still more effort to preserve, than to acquire. We have at no time been more in want of good information, good sense, and sound judgment, than at the present. It is impossible to foresee how we shall be affected by the probable state of Europe. We have at home, absorbing interests. The perils of the last winter and spring seem to have passed harmlessly over. The causes of excitement remain. The danger of disunion is not passed. No one need now be reminded of the consequences of throwing the States into the relation which they sustained from the year 1783 to 1789.

As it is so deeply connected with the happiness of our country, and with national existence, I venture to express some opinions on one subject, which is now much considered in the Northern States, and in England. It is a subject to be regarded with the most fearful apprehensions, and which seems to be improvidently treated. The ostensible cause of nullification, as it is called, was the operation of certain laws of the National Government. It is believed that the real cause lies far deeper, and is of far graver character. Slavery is a sore evil, whether regarded as social, moral, or political. It seems to have originated in the right of victory in war, and was common among all ancient nations. The right of property in a white man gradually expired, probably under the influence of the Christian religion, in the thirteenth century. The slavery of Africans was begun by Portugal, under Royal authority, at the close of the fifteenth century; and was very

soon adopted by Spain. Charles V. granted a patent in 1517, to supply 4000 negroes annually. In the seventeenth century divers companies were incorporated in England, under Royal patronage, and slaves became an article of established commerce. When the Spaniards obtained possession of South America, the natives were slaves in right of conquest, and were employed in the mines, a servitude to which they were found to be unequal. A Spanish prelate, named Las Casas, from humanity to the Indians, introduced the Africans, as the slaves of the Western world, and gave as one reason, that they would obtain the 'inestimable advantage of a knowledge of the true God, and of all the benefits of civilization.' Slavery was soon common in all the Spanish colonies, in the West-Indies; and from thence slaves were first brought, as an article of commerce, by a Dutch vessel into James River, in Virginia, soon after the settlement of the country. Shortly after they were known in all the colonies as property, and in some of the States are now so held.

Morally wrong, and politically grievous, as slavery undoubtedly is, it is not perceived that those who were born in the States, where slavery thus became incorporated with social existence, are to be reproached with its origin, or continuance; certainly not with the former; nor with the latter, unless they have the means of extirpating it. Whether it was right, or wrong, to recognise the existence of human beings as property, in establishing the union of the States, and whether any union could have been effected without that recognition, it is worse than useless to inquire. Doubtless, wisdom, foresight, and patriotism, are to be attributed to the assembly who framed the constitution, and to the representative assemblies of the people who adopted it, as much as to any that ever met. At any rate there is slavery, and the persons of the black man, and of his descendants, are regarded as property in the national confederacy. Over slaves, as such,

the national government has no power of legislation, beyond the securing and restoration of slaves to owners when they are fugitives from the States in which their owners live ; and also when Congress sees fit to resort to direct taxation ; in which case slaves are included with other taxable property. As each State is sovereign within its own limits, except in those respects in which the people of each State have vested powers of sovereignty in the nation, the people of one State can exercise no power over person, or property, within the limits of any other. Such are our relations, whether we like them or not; and such they must continue to be, until changed by consent, or violence. Thus the enormous, dangerous, and revolting evil of slavery has grown up, and such some of the most enlightened men who dwell where it exists, acknowledge it to be. Under these circumstances, some persons among the humane, the moral and religious, who dwell where slavery is not, and who are mostly utter strangers to its practical operation, from personal inspection, consider themselves imperiously called on, from high motives of duty, to demand, and by all means in their power to effect, immediate and entire abolition.

Certainly, great respect is due to any class of citizens, who desire to remove a great moral evil from the land. But it is to be expected of any men, who are humane enough to contemplate a great moral improvement, that they will be just enough to consider whether they have a right to interfere ; and prudent enough to foresee whether their own purposes are practicable; and wise enough to weigh consequences, if they could do as they would. It might be expected that the condition of the black man, who is the object of this benevolence, would be duly regarded, if that of the white man may be disregarded. One would expect well digested plans, and a series of measures, leading to their accomplishment. No such plans and measures are presented to public notice. Nothing is

heard of, but a declaration that slavery is morally wrong, it must forthwith be abolished, and consequences must be left to God. Suppose a cancer had been engendered in the human system, and were extending and associating itself with the great organs on which vital action depends, what should we think of one who would thrust himself into the councils of the diseased party, and insist on tearing the cancer out by violence, and that the consequences might be left to God?

Immediate and general manumission of the blacks, in their wholly unprepared state for such a change, would make them the most miserable beings on the face of the earth; a change which they would shudder at, if they could be made to comprehend it. What a phenomenon would it be in social and political life, to have one sixth part of the whole population of a country, neither aliens, subjects, citizens, nor slaves, and who must become familiar with miseries unknown to any slaves.

But the condition of the white man cannot be disregarded. The inhabitants of the Southern States are our fellow-citizens. They have united with us in forming a political and social system. They, and ourselves, are living under it. If it is good for anything it is good for the preservation of internal peace; for the protection of property, and the lives of those who are bound together by domestic ties. Who in the South, or here, or anywhere, will regard the Union as standing before these, or as standing at all, but for the security of these, and that they may be enjoyed. No prudent, rational man, however sensitive to the impulses of humanity, will set at nought the most powerful motives that can be known to the human heart.

Slavery, it is believed, will be abolished, if not unwisely interfered with, in non-slaveholding States. Many of our fellow-citizens in the South are thoroughly awakened to the evils of their condition, and to the probable, if not inevitable conse-

quences in the course of time. This is unavoidably their affair, and not that, either by right or duty, of those who dwell in non-slaveholding States. We owe to our fellow-citizens of the South, our sympathy and co-operation when they ask for them. It is for them to lead, and for us to follow. Motives far more urgent than any which mere humanity and supposed moral or religious duty can suggest, will carry on the process of manumission, as far and as fast as the welfare of the slaves themselves could justify, even if that were the only motive. Emancipation must be gradual; it must proceed under legislative and executive authority. It may demand the highest wisdom, and all the resources of our nation. At all events, it is certain that northern interference can do no possible good, and may do incalculable mischief. For if we permit our feelings here (for surely it cannot be called our judgment) to dictate in a matter of such exceeding delicacy and intrinsic difficulty, as hitherto to have baffled the best efforts of the wisest and best men, we must prepare to see the end of the Union; and we must forthwith employ ourselves to educate our children to meet the consequences. Among the lectures read at some future, but not very distant anniversary of this Institute, may be some on the best modes of managing, and disciplining *military schools*.*

The colonization of blacks in Africa, and the civilization of Africa itself, are subjects of entirely different character. Both

* There is good reason to believe, that Maryland does seriously contemplate the extirpation of slavery, by gradual colonization; and that the same purpose engages the attention of some of the most enlightened men in Virginia. But in both these States *northern interference* is looked upon with great displeasure. Further south such interference is felt with unqualified indignation. The convictions which prevail in Maryland do not arise from what has been done in the north, nor do they in Virginia. Very different causes may be assigned. If such convictions do not travel southward, the principal reason will be the deep resentment there felt, for the indiscreet intermeddling of northern philanthropists.

of them may be considered as having no connexion with the final extirpation of slavery; and so considered are to be compared with duties which one owes to his own country, and are to be estimated accordingly. If one perform all these duties, he may then think of Africa. It is not perceived that the peace or happiness of our nation is likely to be impaired or promoted by the prosecution of either of these objects, however interesting they may be to some of our fellow citizens.

In contemplating the future, the question of slavery is not the only subject which excites lively interest, and suggests inquiry into the duties which we owe to ourselves, our children, and to posterity.

As every thing human which is best, is liable to worst perversion, a country which has perfect political and religious freedom, must expect to encounter the most dangerous abuses. We shall have 'friends of the people' as though there could be *enemies* of the people, where every male adult must be one of the people. We shall hear taking popular phrases, which though they mean nothing, confer like Greek apothegms, immortality on the inventers. We shall have patriots, who like Swiss soldiery, are faithful to the last drop, to the power that pays best. For real republicanism we shall have parties, in which gifted leaders inspire all the zeal, and command all the effort, which belong to honest patriotism. We shall have politicians who think the sober trust of ruling a free community, is a mere game in which he may win most, who plays deepest, with the most skill, and with the least honor. For the practical and pure doctrines of enlightened Christianity, we shall have form and sound, which leave the mind and heart in the same dull night in which they found them, and terrified by the darkness which they have made visible. We shall have wretches, who though they can look abroad on this wonderful universe, and inwardly on the action of their own immortal spirit, try to say to themselves, *there is no GOD*.

How are these liabilities to abuse, to be met, and counteracted? In no way but by performing the sacred and beneficent trust which our Creator has reposed in us; and especially by taking the pure soil of early youth, and making that to yield as we know it can do. But why should any one task himself with this irksome labor? Because, there must come to every mortal, who is not a fool, or whose soul has not lost all sense in the tanning of iniquity, an hour, in which he must ask, and answer the question, *Why was life given to me, and how have I spent it?*

It may be thought that more has been said to excite apprehension, and to produce discouragement, than the present and probable state of the country can justify. To those who think so, there are many cheering and welcome objects to encourage them; and none more so than the American Institute of Instruction. Though but of recent origin, it has already been an example. It commands the attention and the respect of the intelligent, the virtuous and the learned. All the inducements which arise from love of country, from reasonable self-love, and from the best sort of the latter, when shown in proper knowledge of the best interests of the young, unite to sustain us. We must labor, it is true, but such labor is pleasant, honorable, and profitable, though it may not be the latter, as to this world's goods. There is encouragement too, in the increasing moral feeling of society. The respect for temperance, which is finding its way among all classes, is a remarkable and grateful circumstance, in the character of the times; and the more so, that it is not the consequence of force, or unnatural means, but of reason, and good sense. There is another fact which is full of delightful hope, and even of assurance, in the interest which the YOUNG MEN are taking, in the promotion of the welfare of society. The last celebration of national independence, in this city, was the least ostentatious, the least devoted to the senses, and the most devoted to the mind, and

heart, of any which has occurred. Eleven different societies, composed entirely of young men associated for the worthiest purposes, united to do just honor to the birth-day of their nation, and to the various objects which they respectively cherish. An address was delivered * before these assembled fraternities, abounding in sentiments worthy of the day, and of any assembly, who desire that society shall grow wiser, and better. This is a striking and grateful event. It assures us, that we shall not outrun the public sentiment in attempting to mingle, in the ordinary course of instruction, any teaching which raises the dignity of man; and which enables the young to carry from schools, into manhood, the principles of action which make good men; and the knowledge and firmness which qualify them to preserve the best institutions which good and wise men have ever established.

Gentlemen of this institute: permit me to close this humble tribute to the common cause, by expressing the hope, that the freedom and plainness with which I have spoken, will not be attributed to any unkind or disrespectful motive. It did not seem to me to be an occasion on which one should sacrifice to the gods, as was the custom with one Grecian orator, that he might say only what was flattering to his audience; but one in which a speaker should try to set forth the truth, according to the best of his knowledge, and belief. Allow me, at least, the gratification of feeling assured, that in taking the serious responsibility of addressing you, I have manifested a heart-felt respect for a meritorious order of men, who have devoted their

* The Address was by *Mr Amasa Walker*. The Societies were these. 1. The Young men's Marine Bible Society. 2. Boston Young men's Society. 3. Young men's Society for the promotion of Literature and Science. 4. Franklin Debating Society. 5. Boston Laboring young men's Temperance Society. 6. Lyceum, Elocution and Debating Society. 7. Mercantile Library Association. 8. Boston Lyceum. 9. Young men's Temperance Society. 10. Mechanics Lyceum. 11. Mechanic Apprentices' Library Association.

lives to the arduous service of forming moral, religious, and political members of society out of the young: a numerous class continually renewing, on whom the hope of human happiness depends. Permit me to offer congratulation, that you live, and labor, in an age, when the usefulness of the instructor is fast rising in rank, in the opinion of a judicious and generous community.

The often repeated maxim that a republic must depend on virtue and intelligence for its being, begins to be properly valued. These qualities, if limited to a *few*, will do but little towards upholding any republic. We cannot retire from the ground taken, that this country can be, and shall be, rationally, civilly and in religion, *free*. We cannot retreat from the experiment, in popular government, on which all that is valuable in the country, and the country itself must stand or fall. The wealthy are beginning to realize that if they would preserve and enjoy, they must give their percentage to promote virtue and intelligence. Talents and learning must make their patriotic contributions. Wealth, talent, and learning must study the profitable lesson, that if they would purchase for themselves the pleasures of respect and esteem, they must be diligent in promoting the general welfare, and not content themselves with hollow praises which sound over the dead, in obituary notices, and funeral sermons.

May you, Gentlemen, be worthily and honorably sustained, in doing your important part, towards making just, and strong minds, and pure and amiable hearts throughout a fortunate and happy land.

NOTE.

It appears from the August number (1833) of the Annals of Education, (edited by a gentleman whose exertions in the cause of Education are indefatigable) that the want of instruction in the United States, is a subject of alarming interest. The table published by him, shows, that the number of persons in 1830, above fifty years of age, was about one in twelve; while the number under twenty, exceeds half the population; and that the number under fifteen, exceeds one third. It further shows, that the whole number of children, exclusive of those in New England and New York, is 1,840,000, of whom only one third receive *any schooling*. This editor (who may be presumed to speak from knowledge) considers many schools, even at the north, as 'utterly unfitted to improve the mind, or cultivate the heart.' Taking these as facts, and considering what is implied in the qualifications of citizens, who are to sustain and transmit free popular government, the United States are in imminent danger of losing the fame of having 'the most enlightened people on earth.'

To the number of those who receive no schooling, add those who receive some instruction, but none whatever in the duties of citizens, and who know nothing of the dignity of free citizenship, what reasonable man can expect that our present political institutions can be of long duration? It is historically true, that every people have as good and free a government as they are capable of living under. Ignorance and superstition make ever the best materials for despotism. The first steps towards despotism of the sword, is despotism over the mind. We are permitting, by neglect of instruction, abundant materials for the first kind of despotism. If there be some among the

instructed who are destitute of moral sense, and who can effect and move such materials to their own purposes, what good will it do for the wise and well principled to speak to those who have no ears to hear them?

When such suggestions are made, the common answer is, *Providence will take care of us.* Providence takes care of those who take care of themselves. The motto of divers societies in a transatlantic country is, *Aide toi, et le Ciel t'aidera*—(Help yourself and providence will help you.) This was the maxim of our forefathers. They trusted in Providence most sincerely and devoutly, in considering, pursuing and accomplishing their settlement in this country; but they did everything for themselves, that men could do. Their successors inculcated and manifested the same dependence, but they did all that the strength of body and mind can do to gain, protect and preserve; and *their descendants are free.*

At this day Americans are precisely at the moment of peril. The memory of colonial dependence is gone. The sentiment of acquired freedom is not a daily, constant one. It requires an effort and a course of reasoning, to feel it. Liberty is spoken of—but what ideas are suggested by this word? More probably the liberty to do just what one chooses to do, than the liberty to do what the laws of the country and of society permit, which is the only civil liberty that society can have. How, then, can we hope to maintain civil liberty if we do nothing to teach what civil liberty is? The first step towards such teaching is but little attended to, taking the whole of the young population into view. What is the remedy? It is supposed to be this: The legislatures of the several states have power to do all that the exigency of the country demands. Legislatures do whatsoever they believe constituents will approve. The first step, therefore, is to awaken the general attention to the interests of education; and to make the truth felt, that *no money, public or private, is so well laid out as that, which goes for* GENERAL *instruction.* Why *general* instruction? Because the most wise, eloquent and honest, are powerless in a country that rules by universal suffrage, unless they speak to those who can understand. So, what avails it, if there be some who are moral, virtuous and exemplary, if a majority of citizens are unable to comprehend the value of such qualities? *Thus, education is not a concern of a few privileged persons, but of all persons.*

LECTURE I.

ON THE

IMPORTANCE OF A KNOWLEDGE

OF

THE PRINCIPLES OF PHYSIOLOGY

TO

PARENTS AND TEACHERS.

BY EDWARD REYNOLDS, M. D.

PRINCIPLES OF PHYSIOLOGY.

An uncommon attention to the cause of Education distinguishes the present age. The public mind seems to be fairly awake to its high interests. A just perception of the infinite superiority of mind over matter begins to pervade all classes of the community. This is seen in the liberal patronage bestowed on all institutions for the advancement of the human intellect; in the increasing number of our schools and seminaries of learning; in the various improvements that have superseded former modes of instruction; and in the concentrated efforts of many minds for the purpose of still further promoting the cause of education. We behold it in the evident extension of knowledge among all classes of our citizens, in our crowded lecture rooms, in the multiplication of books, and the daily increasing facilities for mental cultivation. It appears also in a general amelioration of manners; an improvement of morals; and the happy and prosperous condition of the community in which our lot is cast.

It is seen in the attempt to adapt our institutions to the wants of all ages; from the little child who is taking his first step in the path of knowledge, to the full grown man who is about to assume his part in the practical struggles of life.

We rejoice to see it in the annual assembly of this Institute of Instruction; composed of enlightened and liberal minds; animated with the desire of promoting the interests of sound learning; and convened to deliberate on the best means of effecting its important objects.

The philanthropist rejoices when he beholds it. He is filled with strong hope; and cheered with no ordinary expectations for the future. No lover of our republican institutions, no friend to the best interests of man, can regard it with indifference. The cause of rational liberty and sound morals, and the cause of education have one common bond of union. They must stand or fall together. It is only by promoting the latter, that we can lay the foundations of our happy institutions broad and deep; and erect a superstructure of enduring strength.

The physiologist also rejoices at it; but with fear and trembling. He sees much in it to excite alarm, as well as to animate hope. At a period like the present, when the cause of education has taken such strong hold upon the mind, and literary excellence has become one of its chief desiderata, he feels it to be peculiarly necessary that its dangers as well as its blessings should be accurately pointed out. Otherwise, the good work, thus auspiciously begun, may be seriously retarded, and the high hopes it has excited, may end in disappointment.

It is well known, that deranged health is one of the common consequences of a studious life. This is especially true among the young. The history of literature, in all ages, presents melancholy instances of superior minds, over which the grave has prematurely closed; of genius formed to take a long and adventurous flight; and talent whose bright beginnings gave the promise of enduring fame, suddenly extinguished. Nor do our times, with all their boasted improvements, fail to swell out the melancholy list. The path of science is still beset with many dangers. The pallid look, the dull eye, the weary gait, and the emaciated forms of many of our most promising

youth, cannot have escaped the notice of every careful observer; nor failed to excite the apprehensions of every faithful parent and teacher.

These facts show too plainly that all is not yet right; that our modes of education are not yet perfected; that the reform is not complete; that there is still some rubbish of the departing system to be cleared away; and much in our imagined advancement that does not deserve the name. They mingle too many apprehensions with the high hopes that spring up in the mind, when it surveys the improvements of the day; and they should excite us to a more diligent inspection of the various causes that lie at the foundation of these dangers.

A double diligence is necessary at this time, since the very improvements in education, over which we rejoice, have kindled a spirit, which to a certain class of minds, and that the best class, is full of danger. They have multiplied the means of supplying a literary thirst, and multiplied, at the same time, the temptations to sacrifice health and strength to the desire of cultivating the mind.

Far be it from us, to say anything to repress this desire, where it does not exceed its proper bounds! We are not among the number of those who believe that ill health is a necessary consequence of study. The frequent failures that come under our observation, especially among the young, are to be attributed to many other causes. It is the unfavorable circumstances under which study is performed. It is crowded rooms; improper hours, transgressing upon the period of sleep; positions unfavorable to the freedom of the corporeal functions; improper diet; excessive action of some organs, with unnatural repose of others. It is overlooking the peculiarities of the system, dependent upon various ages, and different temperaments; tasking the mind with excessive duties, or at unfiting times. It is a spirit of competition, wholly unworthy the true lover of learning; an unholy competition, that should be

repressed rather than encouraged ; a competition that protracts the labor of the mind, long after the changed countenance has uttered the warning voice, that nature demands repose. It is these and many other habits, at variance with the laws of physical education. Finally, it is the false feeling, which would raise man above the sphere in which the Creator has placed him ; which leads him to act as if he were all spirit ; and makes him forget that he is half flesh.

Before the world sees the perfection of which the mind is susceptible, and the height and depth of discovery, it is destined to make, it must retrograde, if I may so say, and learn to appreciate more accurately the importance of the body. It must learn to trace and understand the inseparable connexions, however humbling to an unphilosophical pride, between mind and matter ; to perceive the thousand exquisite sympathies existing between them ; and the manifold ways in which they act and react upon each other. It must take such a deep look into the body, as will teach more effectually than has ever yet been done, that every system of education, which is not in strict, accurate conformity to the laws of health ; every system, where the physical does not keep exact pace with the intellectual nature, is radically defective ; and cannot produce a sound mind or a sound literature.

The relations subsisting between literature and the health of scholars, would form a curious subject of inquiry. Perhaps it might appear, that not a small portion of all that is weak in judgment and false in taste, was intimately dependent upon the diseases of the body. The body and mind are united by such peculiar, mutual sympathies, that a healthy literature perhaps depends much more upon a healthy body than is commonly supposed.

A more serious attention to this subject is forced upon us at the present time, by many melancholy facts. Its importance has been painfully engraven by medical experience, on my

own mind. I have witnessed many instances of disease too evidently the result of overaction of the mind in early life. It was my painful duty a few weeks since, to see the earthly career of a young lady, whose uncommon promise had excited the attention, and interested the feelings of many hearts, forever closed, by disease of the brain ; which, from its history, progress and post mortem examination, proved to be, beyond a doubt, the result of undue use of the mind in her course of education. The malady, as is too often the case, made its insidious entrance to the system, by symptoms so slight that they occasioned no alarm, until it had obtained a fatal grasp, for the removal of which, all the efforts of art were unavailing. I could point to other individuals who have been the subjects of the same affection, and who were saved with much difficulty. I now know others, for whose safety I feel great apprehension. These cases are more numerous than is commonly supposed. Their true cause often remains undetected. They show that, in an ardent ambition, on the part of children, their parents or teachers, to cultivate the mind, the body has been too much overlooked.

Abundant evidences of this mistake, also appear in the present condition of our studious men. How many of them are suffering from infirmity and disease! How many minds, once bright and active, are condemned to a life of diminished usefulness by the horrors of dyspepsia! How much talent lies dormant by the morbidly sensitive eyesight occasioned by inordinate and untimely use of the eyes! This last mentioned evil is increasing to a fearful amount among the young. Accurate inquiries have convinced me, that a large number of these individuals must go back to the school room, to find the source of their infirmities.

All those habits, therefore, in our modes of education, that exert an unfavorable influence upon the body, and which, through it, may sooner or later injure the mind, are immensely

important; and imperiously demand a more faithful investigation from parents and teachers, than they have yet received.

Before proceeding any farther, permit me to call your attention more particularly to the union existing between the body and the mind, and the constant, unavoidable influences they exert upon each other. The existence of these reciprocal connexions is the first and most striking fact presented to the student of man. Of the philosophy of this union, we know almost nothing. It is one of the most curious, unfathomable subjects ever presented to the human mind. The more the mutual action and reaction of the body and mind is examined, the more wonderful it grows. The Creator has never withdrawn the veil of obscurity that hangs before it. Its nature and causes have not been revealed; yet we are permitted, as in other mysterious subjects, to behold and understand its effects. The more these are observed, the more we shall become convinced, that the individual who wholly disregards them, is unfitted for the occupation of a teacher of youth.

These effects are the subject of constant observation. We behold them daily in the strange play of the passions. Observe the stormy circulation, the convulsive muscular motions, the foaming mouth, and the glancing eyes, so instantaneously produced by a fit of anger. Grief makes its insidious entrance to the very citadel of life; and weakens its forces, one after another, until by slow degrees, they lie prostrate before its paralyzing energies. Extreme joy may destroy life. The passion of fear diminishes insensible perspiration; weakens the pulse; empties the vessels of the skin; and robs the muscular system of all its power. The most trifling derangements of any of the organs of the body sometimes generates a moping melancholy or a wild delirium, that endures through life.

The mental operations are also constantly modified by the varying conditions of the body; by hunger and thirst; by immoderate nourishment; even by the slightest change of air.

Who is ignorant of the wretched effects of an east wind upon the body, souland spirit? The energies of the stomach are suspended by intense application of the mind. Who has not occasionally forgotten his dinner, while engaged in severe thought? What physician has not seen the power of thought wholly destroyed by acute pain? How is the memory impaired, the judgment weakened, and the imagination diseased by the slightest disorder of the digestive organs! Whence the opinion of the ancients, that the stomach was the seat of the soul, but from the various and opposite affections of the mind, so uniformly dependent upon its healthy and unhealthy conditions? The experience of every observer has taught, that the judgment is less clear after a full meal than before. What remarkable differences in the character of mind, temper and dispositions are invariably connected with the different temperaments of the body! Who does not know, for example, the influence of the liver upon the temperament? 'Its predominance over the other organs, throws over the external habits, the functions, the passions, the character itself, a peculiar cast, remarked by the ancients; and fully confirmed by modern observers.' Differences equally remarkable are uniformly true of the sanguineous and other temperaments.

These are a few of the thousand examples that may be cited, to show the existence of a close and wonderful union between the body and the mind. They are noticed thus particularly here, because they lie at the very foundation of what is to follow. Its important connexion with the subject of education appears on the slightest reflection. An accurate knowledge of all its bearings would aid in suggesting valuable improvements; and banishing a multitude of evil habits; which cannot fail to injure the body and the mind.

The question naturally arises here, how shall the parent and teacher obtain the clearest views of these connexions and

reciprocal influences between the body and mind, in order to be qualified to prevent the injurious habits that render study dangerous to health; and to adopt such measures in the domestic arrangements and school regulations, as will secure to children the double advantage of a sound cultivated mind and vigorous health?

We answer, this can only be effectually done by a knowledge of the principles of physiology; or the science that treats of the phenomena, conditions and laws of life; explains the healthy functions and uses of the various organs of the body; examines the different systems that compose the whole man; with all their mutual connexions, dependances and sympathies, in the several stages of life; from his first formation to the period of decay and death; ascertains which of these systems exerts a preponderating influence and action in the different stages of his being; and shows the consequences of such preponderance on the individual during their continuance; and the dangers to which it exposes him. It is the science that traces the intimate relations subsisting between the animal, intellectual and moral life; describes the manner in which the mental operations depend upon the arrangement, organization and powers of the body; and the influences which the various functions, respiration, digestion, circulation, nutrition, &c., exert upon the activity of the mind; and explains the mutual changes they are capable, through unnatural excitement, of producing upon each other.

Such is physiology. As it is the only safe guide that directs the physician through the many obscure and devious paths of disease, so it affords the best light by which the parent and teacher can detect the various dangers that lie concealed in the path of youth.

It is evident from the above definition, that physiology opens to the view a vast field, which the present occasion does not permit us to explore. We can only enter it; and

gather up some of the facts that lie upon its surface; that as parents and teachers, we may be animated with a stronger desireto find the hidden treasures of knowledge it contains.

1st. In the field of physiology, we learn the fact so important to be well understood and thoroughly appreciated in its connexions with education, that the brain is the organ of thought; the instrument with which the mind, during its abode in the body, performs all its functions; and that it is also the great source and centre, whence vitality flows out to all the various parts of the body; supplying them with the living energy so necessary to healthy action.

2d. Here too, we learn that it is subject to the same laws that regulate the functions of all the other organs; that these laws cannot be violated with impunity by the brain any more than by the stomach or liver; that like them, from the very constitution of nature, it must have its alternate seasons of labor and repose; that the brain cannot be always thinking any more than the stomach can be always digesting, or the muscles always moving; that like them, it is nourished and supported by arterial action; that when the amount of this rises to a certain degree, it is a condition of health; and that when it exceeds this, it is a condition of disease. Intemperance in study produces an unnatural determination of blood to the head, as certainly as intemperance in the use of ardent spirit does to the liver. Whence the pain, sense of heat and confusion of head, experienced after a season of severe mental labor? What is it but an increased action of the arteries supplying the brain? Look at a man who has been for a long time engaged in active thought, or excited by the heat of composition? What occasions the flush upon his cheek? Whence the unusual beating of the carotid arteries; and why for some time after he has discontinued his labors, does he feel the pulsations of all the cerebral vessels? When he retires to

bed why does the excited condition of these vessels keep him awake for hours before he can compose himself to sleep?

Whence the total derangement of all the functions of the body, the paleness, debility, palpitations, languor, deep oppression of spirits, nay, the vomiting, epilepsy and death, by which learning has often been deprived of her brightest ornaments? Does not all this show a diminished action of all the organs, from the overloaded condition of the brain, whose office is to supply them with the energy necessary for the performance of their functions?

What shattered the gifted mind of Henry Kirke White, until it only gave forth those delirious wanderings, the precursors of the fatal lethargy that laid him in the grave? Why was this interesting youth destined so soon to fulfil the almost prophetic creations of his own fancy, when he said, 'If I were to paint the picture of fame crowning a distinguished undergraduate, I would represent him as concealing a death's head under a mask of beauty.' Who does not see the same fact in the melancholy depression of mind that preceded the death-bed scene of the lamented Urquhart? What occasioned the unmeaning stare, and the faltering tongue, that first alarmed his physician? In the last act of his short, but brilliant career, who does not see clear evidences of an oppressed brain, even while the spirit of God was pouring its soothing influences on his departing soul?

All who read the history of such individuals, are ready to exclaim, it is undue use of the mind. But no definite ideas are attached to the words; and the evil is suffered to go on — physiology defines its meanings; and directs the vision to facts, which cannot fail to arrest the attention, and command obedience. Under its light, the obscurity that hung so long over these cases, breaks away. Physiology proves it to be pressure, downright pressure upon the brain. It shows the arteries under the stimulus of intense or too long protracted thought,

assuming an unnatural action; sending more blood to the part than its tender substance can bear; until at last, the point of safety is past; and lingering disease of all the organs, to which the healthy condition of the brain is indispensably necessary, unfits the student for extensive usefulness; or fatal disease blasts his hopes, and lays him in the grave.

3d. Physiology directs the attention to another very important fact, viz., the predominance of the brain and nervous system over all the other systems of which the body is composed, during the periods of infancy, childhood and youth. The brain of the newborn infant is immensely large in proportion to the other organs. The head forms at this age one third of the whole mass of the body; while in adults, it is only an eighth. The same is true of the nerves. They are proportionally larger than at any subsequent period; so that no anatomist would think of selecting any other subject for the study of these parts.

4th. The blood vessels supplying these organs are also proportionally larger, and more numerous than at any subsequent time.

This extraordinary development of the brain and nervous system, and this condition of its blood-vessels, continue to preponderate over all other organs, though it is constantly and gradually diminishing, until the age of puberty; when it yields partially to new influences, the result of another system coming into action. It continues, however, notwithstanding these, until nearly the adult age, when something like a general equilibrium is established between the different systems.

5th. Another very important peculiarity of the brain at this period of life, is its softness. It is found on examination to be much more tender in its structure than at any subsequent age. This difference is so striking, that the brain of an old man is always preferred by anatomists, for the purposes of dissection in the study of this organ; because it is so solid, and

breaks with much less facility. Its vessels are also diminished in proportion to its increased hardness. This fact explains the difference in the color of the brain in infancy, youth and old age. In the two first, it always presents a pinkish hue ; while in the latter, it is of a dull, tarnished color.

This arrangement of the Creator, exhibits an exact adaptation of physical structure to the nature, design, the peculiarities and wants of childhood, youth, and all the intermediate stages of life, on to old age. It is one of the most striking instances of beautiful harmony between the physical, intellectual and moral nature of man, in the several great periods of his existence.

The newborn infant is the most helpless of all creatures. He has not the instinct of other animals. He is destined to be the child of experience. During the first portions of his being, therefore, his structure should be such as would peculiarly fit him for the acquisition of knowledge ; such as would make him the creature of sensation and motion. The above mentioned predominance of the brain and nervous system, and its tenderness and pliability is precisely that arrangement required by this necessity. If not obstructed by false habits and false modes of instruction, its evident intentions would be fulfilled in the most perfect manner.

Youth, therefore, is, as the physiologist expects, and hopes to find it, full of life and vivacity. Its senses are all wide awake. Its ears are alive to every sound ; its eyes open to every object. Its limbs are ready to obey with alacrity the impulse of every sensation. It overflows with warm feeling, quick sensibility and lively imagination. It is impatient of confinement and restraint. It is endowed with an amount of vitality, which, to prevent suffering, must expend itself in vigorous action. It has consequently a desire for constant motion, which nothing can repress. Activity of mind and body are as natural as breathing ; and it is as impossible for him, from

his very physical structure, to live without the one, as the other.

The physiologist expects to find him as he is. When he examines the structure and condition of the brain, and compares it with other periods of life, when he sees its softness and flexibility, and the full developed nervous system, he expects to find all his senses acute. He expects to find him easy to be instructed; and capable of learning with more facility than in after life, when the fibres of the brain have become more rigid. His astonishing memory and his imperfect judgment are precisely what he expects to find. He does not look upon this interesting age with anger, because it cannot comprehend dry grammar and thorny syntaxes, and takes no delight in mathematics and logic. In the pleasure with which it pursues all physical objects, and drinks in the treasures of knowledge that flow from them, he feels a full sympathy; and sees only the harmonious workings of nature, and the perfect adaptation of the dispositions and faculties of the mind to the physical structure of infancy and early youth.

In the same cause, in part, a difference of structure, he finds a ready explanation of the warm heart, the noble aspirings, the daring courage, and the passion for the stormy scenes, which characterize the young man; the steady perseverance, with which, in middle age, he pursues the sober realities of practical life; and the preference uniformly discovered by the old man for retirement, silence and shade.

6th. But in this full development, this preponderating influence of the brain and nervous system, so admirably calculated to secure and advance the moral, intellectual and physical progress of youth, the physiologist discovers causes of anxiety and alarm as well as gratulation. He knows that those organs which predominate in the several stages of life, are most liable, during those stages, to become diseased. In youth, as already stated, it is the brain and nervous system. Consequently, it

is in these organs, that we are to look for the diseases constituting its peculiar dangers. Whoever observes the diseases of children cannot fail to notice the frequent affections of the brain and nervous system; and the readiness with which these parts enter into diseased sympathy with all the other organs; how easily the brain becomes affected with epilepsy, convulsions and dropsy from the slightest causes.

Physiology teaches that this delicate structure is destined to receive, according to the calculations of Haller, from one third to one half of the whole mass of blood, thrown out at each contraction of the heart. It exhibits all the wonderful contrivances of structure formed by the Creator, to break the force of this immense column of blood; so that it is wholly turned out of a straight course; and loses a great portion of its momentum before it reaches the brain, and comes at last, like light to the eye, in so gentle a manner, as to be void of all danger. It shows also the equally wonderful contrivances to secure its return back to the heart, not only without the least delay, but with the utmost possible rapidity. We are taught by all this care with which it has been guarded, and by various phenomena, that the brain, though the very fountain of life and intelligence, the supreme arbiter of the health and strength of all the other organs, is itself in the midst of dangers, which if not thus guarded against, would be liable every moment to impair its energies, or destroy its functions. From all this we gather up a lesson of wisdom; and obtain a practical perception of some of the dangers that beset the path of education.

The simple statement of these facts shows the importance of physiological knowledge to parents and teachers, in the education of youth. If I mistake not, they enable us to detect with ease, some of the errors that prevail in many schools; and which, by their unfavorable influence upon health, may sooner or later injure the mind.

Among these may be ranked, all those regulations which tend

to force pupils to too great mental action. Is not this the great mistake of the present time? Have we not been led by the pride of what is called 'the march of mind,' to throw too much duty upon children, especially upon those who are very young, whose brain, as we have seen, is very susceptible and very tender? Are not our little boys, for instance, of seven and eight years old, engaged in the study of mental arithmetic, geography, grammar, latin, parsing, reading, writing and spelling, from eight till twelve or one, in the forenoon, and from three to six in the afternoon? And as if this was not enough, are they not obliged to gather about our tables in the evening, to worry over their home lessons; or hurry through their breakfasts in the morning, because exhausted nature has demanded full repose, and they have not awaked at a sufficiently early hour to master their task; and had rather lose their meal, than run the risque of being detained an additional hour in school, for missing a word, and lose their play? All this is true. Little boys of seven and eight years old! to whom, if nature's indications are worth regarding, play is so much more important than learning. Do they not come home to us after their seven and eight hours' imprisonment, out of humor, and pale? the bloom so natural to the age, faded from the cheek, and complaining of headache, and dizziness, symptoms so unnatural to the age?

A thorough appreciation of the above physiological facts would strike a deep blow at this unwise system; and prove that they, at all events, who have ambition enough, or fear enough, to conquer opposing nature, and yield to the labor and restraint of the school system, are doing almost anything rather than improving the mind. They are applying an artificial stimulus to the brain; increasing the action of its blood-vessels, breaking through the bounds set up by the Creator to protect the organ, diminishing the vital energy it should communicate to the body, and unfitting it for an instrument of

accurate, active and long continued thought. It may make them, as it often does, objects of pride and wonder to the parents, who see not the evils that are lurking beneath the system; but it may also render them blockheads in after life. The old nurse who is despised for superstition, when she gives utterance to her fears, by repeating the old adage, 'too smart for long life,' gives an evidence of wisdom which has been confirmed by the experience of all times.

The above facts also lead us to doubt the wisdom of keeping children, large or small, confined for so many hours, in school; and confined, as they generally are, on seats or at desks, where the body and limbs are cramped for want of room, with nothing to lean the back against for the purpose of resting the weary muscles, — expected often to sit up straight, — denied sometimes the poor privilege of leaning on the elbows for partial repose, because such a position is not sufficiently decorous; and all this for three, four, and sometimes five hours, with the exception of a short recess of fifteen minutes, — in beings too, whose very structure almost compels them to be in motion; to whom continued rest is punishment and pain. A little boy, who loves his books, said to his father in my presence, 'Father, I always wish when I am in school, that the four hours could go off in one, because my back and legs ache so, sitting.' What physiologist does not sympathize with the poor child, who has to bear, in his age of motion, a season of rest that would be intolerable to any parent or schoolmaster, even though they have reached the dull, uninteresting period, when the abdominal organs rule ascendant over the brain and nervous system? What mode more likely to render learning a toil, and to give the school-room the character of a place of penance? Does it not make children hate school? Is it not plain that any position, or any confinement which renders the body uncomfortable, acts at any age as a dead weight upon the mind; subtracts from it a

proportionate amount of power, and retards the intellectual progress?

Do not these facts call for a change; and convince us of the advantages of providing children more convenient seats; and allowing them the privilege so indispensable to our own happiness, of more frequent alternations of rest and motion; and of securing to them the benefit of everything that can add to their bodily comfort? Might they not perform a larger portion of their studies at home, where the limbs would have free play, and use the school-room more as a place of recitation?

Parents may also learn a useful lesson from these facts; by which they and their children would be spared no small amount of the mental irritation, occasioned in the family, by the impracticable attempts to detain their little ones in one place; to keep them still; to make them behave (to use the common parental phrase) like little ladies and gentlemen;—to the souring of much good temper, and the no small annoyance of both parties. A view of the condition of the brain and nervous system at this tender age, would convince them, that, when they thus attempt to force nature, they aim at an impossibility; that the child, like the bird of the air, is all nerve; and that it must move or die. The parental tyranny so often exercised in this particular, and which sometimes does not stop short of a smart box upon the ear; that most unphysiological and unphilosophical of all punishments, is a decisive evidence, if not of a hard heart, of a hardened brain; and is as inconsistent with physiological principle as with common sense.

A clear perception of these facts would lay the axe to the root of another very dangerous error, the unchristian spirit of emulation encouraged at some schools. Whatever beneficial influence this may sometimes exert upon dull and inferior minds, it is full of danger to those of a higher order. The boy

or girl who is the subject of this emulation, of which we hear so much now-a-days, under the phrase, 'keeping their rank,' no matter how it is excited, whether by silver medals or the weekly bill of marks, is in a constant state of feverish excitement; and occupied day and night in devising plans for the downfall of a rival. It is often a spirit that is not content with the perfect performance of school duties; it follows the pupil beyond the precincts of the school-room; and steals upon the hours that should be devoted to exercise and amusement; so indispensably necessary to the health both of body and mind. It is a spirit that grudges even the short fifteen minutes allowed for the recess. It encroaches also upon the hours of sleep.

Many of our girls under the influence of this spirit, perform an amount of labor, that would wear out any mind. Some do it from a consciousness of superior talent; some from a determination not to be outdone by them; others from the wounded feelings occasioned by standing far below. They rise at five in the morning, and study till breakfast time; from breakfast they go to the school-room; where they are engaged in recitations and study until one. The labor begins again at three, and continues till six. The evening brings no repose. At ten they lie down exhausted; and awake in the morning, to renew their mental toil.* And what are the studies? Astronomy, Mental Philosophy, Algebra, Composition, Geography, History, Latin, French, Spanish and Italian.† All this is done too at that critical age when nature is striving

* To many the Sabbath dawns no day of rest; and the expected analysis of the clergyman's discourse makes even the house of God a place of mental toil.

† Some of these studies would severely task old, hard brains. If the physical powers of children are strained, if the muscles and other organs are put to man's work, all know that premature old age is the inevitable consequence. By what law does the brain enjoy an immunity, when strained beyond its natural power, from similar danger?

to establish changes in the constitution of the utmost importance to its stability; and which peculiarly unfits it for the undue stimulus of any important organ, particularly such an organ as the brain.

Is it surprising that such labors, continued and kept up at this period, while the brain is yet tender, two, four, and six years, should lay the foundation of incurable nervous excitability, crowd the brain, and weaken its energies; produce dyspepsia, obstruct the bowels, debilitate the muscular system, empty the vessels of the skin, and sometimes depress the spirits, impair the memory, confuse the judgment, break down the power of thought, and wholly defeat the object of education? This is no picture of fancy. I am well aware that most youth do not injure themselves by study; and that the majority do not feel the stimulus of emulation to their detriment. But every physician in extensive practice knows that these consequences exist, in a greater or less degree, among many of our children; particularly our young ladies; and that the worst part of this description every now and then happens among our finest and brightest youth. I have myself known more than one individual who has fallen a martyr to it. One Kirke White, be it remembered, is worth many inferior minds.* Whoever will study the biography of distinguished youth with this subject in view, will be startled at the amount of danger to which uncommon talent pressed on by this sort of excitement is subjected. The evil, to say nothing of its moral tendency, is so great, that when I see our pale, weary

* Girls are subjected to greater danger, from yielding to the full influence of the school system, than boys. Boys have harder heads; girls have better hearts; more sensibility, more conscientiousness. Boys yield themselves to the full excitement of youthful games; and while their physical powers are strengthened by this best of all exercises, they forget the pride of success or the mortification of defeat at school. Girls are expected to go home with becoming gravity; and instead of the hoop and ball, to sit down to their needles, music and drawing lessons.

girls bring home their medals or their faultless weekly bills, it fills me with too much apprehension, to give me any pleasure. I asked one of these girls, who from the above causes had been the subject of a dull headache for two years, if she was obliged to study? 'Oh no,' said she, 'not unless I please.' Well, why do you? 'Why who,' said she, 'wishes to be thought a fool, and bring home once a week a bill, with nothing but ones and twos on it.'

But what shall we say of those individuals, who, though not stimulated by such means, overuse the mind from a native passion for learning? Physiology directing the vision to such cases as White, Urquhart, and our own beloved Buckminster, would throw discouragements in the way; and if these failed of success, would seek a remedy in parental authority. It would no more permit a child to destroy health, and induce premature mental decay by extravagant study, than to indulge in any other habit dangerous to health and happiness.

Is it not to these and other kindred causes, that we are to attribute the apparently strange fact, that such a small proportion of our brightest boys at school, fulfil in after life the promise of their early years? And that such a number who gave no promise in youth, so far outstrip them in practical life? How little is known of the juvenile progress of what are called our self-made men? To what is their signal success to be attributed? Is it not to the fact, that the brain was not overused in youth; and when ambition first seized upon their minds, it found them united to vigorous, healthy bodies; which enabled them to keep on untired in the race to the end?

Let not the indolent suppose that they can take shelter under these remarks. It is an excessive use of the mind only against which we declaim.* Physiology also holds out a rod for the fool's back who wastes the period of youth in mental

* It is what Solomon meant, who spoke like a physiologist, when he said, 'much study is a weariness to the flesh.'

sloth and inactivity. It shows them that they are also infringing one of her most important laws; which requires that every organ, in order to obtain strength, must be made to perform a full, natural amount of action. The proper use of the brain is one of the reasons why the names of so many distinguished philosophers stand high on the scale of longevity. Activity of mind doubtless constituted one of the principal causes of their length of days as well as their happiness.

Among the customs to which a knowledge of these facts directs the attention, and which may injure the body by straining the mind, and wounding the feelings, is that of classing boys together, of different degrees of talent and various powers of mind; and giving to each the same task and the same study, without any regard to the dispositions, nature and power of the mind. In every such class, there will be some two or three, who perform it with ease. They who come nearest to them, if ambitious, must keep near by an amount of labor and straining of the brain, wholly incompatible with its healthy condition. They who stand lower become disheartened and humbled; and feel a disinclination for learning, which, under more favorable circumstances, might not exist.

All children are not qualified by nature for the same amount of labor, or the same kind. Is it wise that they should be all put to the same? Perhaps it remains to be proved how far the science of phrenology is true, which attributes different faculties of the mind to differences in the structure of the brain. But all know that there are native and unconquerable varieties in the character as well as the powers of the mind. Some children are distinguished for memory, others for imagination. Some are peculiarly fitted by nature for the acquisition of languages; others for mathematics and the abstract sciences. If it were possible to introduce the changes, which, in accordance with physiological principles, these native differences require, it would save an immense amount of useless straining

of the youthful brain; much of the discouragement and mortification that besets the pupil's path; and add more permanent and practical results to the cause of education. The persevering attempt to make the young mathematician contented in the magic regions of poetry, or to bring the soaring spirit of the youthful poet down to the accurate calculations of mathematics, will always be attended with a wear and tear of brain, as injurious to the cause of learning as to the health of the student.

1st. The light of physiology enables us to see and comprehend the curious mysteries of digestion; that wonderful function, by which the foreign elements that surround the body, when received into it, are changed in their properties, animalized, and converted into its own peculiar substance. We see this new compound taken up by myriads of vessels prepared for that office; carried into the heart, from whence they are conveyed by the arteries, and deposited wherever they are needed, to repair the waste perpetually taking place in the system. We see that this function, by which the body attains its great strength and wonderful growth, is infinitely more vigorous and active in infancy and youth, than at any subsequent period of life. It is this extraordinary activity that fits the body to be the residence of the mind, during the whole period of its existence here. The craving appetite of school-boys is the result of this arrangement. In order to be fitted for the sphere of duty to which the Creator designed them, they have a body to build up as well as a mind.

2d. Physiology reveals the intimate sympathies existing between the two organs, the brain and the stomach. It represents the brain as the source of all the power of the latter; and teaches the reason why an enfeebled brain must necessarily occasion a weak digestion. To borrow a thought of Tissott, for the purpose of a short explanation, 'intense or too protracted action of the mind ties, as it were, a ligature about the nerves

proceeding from the brain to the stomach, which supply it with its energy, impairs its powers, and unfits it for the perfect performance of its functions.

3d. It also teaches that the digestive function is so immensely important to the animal economy, that when it commences, all the other functions proceed with diminished activity; that the whole power of the body may be concentrated, as it were, upon the stomach; and enable it to finish its task more perfectly. Hence, the dulness with which the mental operations are performed; the feeling of drowsiness that creeps over the system; and the indisposition for active movement of any kind, after a full meal.

The knowledge of these facts presents additional proofs of the danger of overtasking the minds of the young, by the above mentioned or by any other modes. The full grown philosopher, whose body has attained its period of perfection, may work his brain, until he loses his appetite, and forgets his dinner. Like Sir Isaac Newton, he may live whole days upon his cracker and cup of cold water; and perhaps, be fully compensated for the slight injury done to the body, by the additional clearness gained to the mind. But not so with the boy, who lives under the double necessity of building up the mind and the body together. If he persists in such a course, it is at the risk of an imperfectly developed body; which always has been, as the history of literature abundantly proves, and while the system retains its present sympathies and peculiarities, always will be but another name for an imperfectly developed mind.

Do not these truths suggest the propriety of attending to the periods of the day in which children shall be exercised with their severest studies? Are not the morning hours, for instance, better calculated for such branches as require close application of the mind, than the afternoon? Who does not know the (horrible) influence of a full dinner upon the clearness and power of thought? Digestion is performed with more ease

and rapidity in children than in adults. They, therefore, suffer less inconvenience from the infringement of this physiological law than the schoolmaster. Yet they suffer enough to render the subject worthy of consideration. If parents and teachers would permit their contemplations to descend a little from the upper, to the lower regions, — if like Lord Bacon and Plato, they would now and then leave the brain, and pay a visit to the stomach, and become better acquainted with its wonderful influences upon the memory, the imagination and the judgment, they would confer a better service upon the cause of sound learning, than by depriving a poor boy of his dinner for a morning misdemeanor; by prolonging the school imprisonment, as is too often done, for an imperfect afternoon lesson; or attempting to make the mind perform an impossible task by the stimulus of the birch or ferule.

Physiology teaches that violent exercise of the body is also injurious after a full meal. Does it not show the impropriety of compelling boys to run from their father's dinner tables, sometimes unavoidably in great haste, in consequence of the distance of the school-room; at others from the irregular hours of the family, over which they have no control, by the law which ordains that the door shall be closed upon every one who arrives after a certain hour? With what hope of success would the majority of boys thus conditioned, the stomach full, and obliged by this cause to perform extra labor, sit down to a lesson of obscure latin, or a difficult problem in mathematics?

But other evils are attached to the school room, which, like these, are contrary to physiological principles, and constantly tend to injure health. One of the most important is the bad air of many schools. Physiology, by making us acquainted with the curious phenomena of respiration, and the indispensable necessity of pure air to health, enables us to realize the full amount of this evil. It teaches that a very curious pro-

cess constantly takes place in the act of breathing; that at each inspiration, the vital portion of the air called oxygen, separates from it, and unites with the blood thrown at each contraction of the heart into the lungs previous to its distribution over the body; that it comes into the lungs black, loaded with carbonic acid, and other materials that unfit it to be again distributed to the body. It receives in the lungs the oxygen from the inspired air; and acquires new vital properties, which again fit it for the purposes of life; and imparts at the same time to the portion of air expired, its carbonic acid and other deleterious properties; respiration, therefore, is one of the grand means by which nature unloads the body of a vast amount of the useless parts ever passing off in the great struggle of life; and oxygenates and vivifies the new materials brought by digestion into the circulation to supply their place. This mighty process is very imperfectly effected by impure air. They who are obliged to pass a great portion of time inspiring it, incur the danger of having the vessels filled with impure blood. Is not this one cause of the pallid skins of our boys and girls? Is it not because their blood is so imperfectly oxygenated in the impure atmosphere of schools, overheated rooms, and close, confined bed chambers? Should it not awake a sufficient interest in the minds of parents and teachers to induce them to institute a more accurate inquiry; and produce a reform? What can be more unhealthy than many of our school rooms, crowded with a great number of children, breathing the same air over and over, until, to use the language of an intelligent pupil of one of our best seminaries, 'it becomes so oppressive and offensive, that it is absolutely necessary to raise the windows; which must be done at the expense of the few, who, by their situation in the room, are exposed to a direct current of cold air. Ought not the teacher, she continues, to feel a responsibility upon this subject, and consider the proper ventilation of his school room as the first and most

important duty? What could be less conducive to health than the stifling atmosphere of a small and crowded room? Should not the temperature also be regulated by a thermometer, and not left, as it is, to chance and caprice.'

The above facts are well adapted to impress upon the mind the importance of a knowledge of the principles of physiology in the management and education of youth. Did time permit, many others might be adduced equally striking. These were selected because they seemed calculated to direct the attention to some of the most dangerous habits that prevail in schools. Among the great number, which the science presents, others might be mentioned; each peculiarly fitted to unfold other errors that tend to injure health; and to suggest their appropriate remedies.

I might explain to you the structure and functions of the osseous and muscular systems, and the laws by which they are governed, with their peculiarities in childhood and youth; and deduce from them the reasons, why so many of our educated females are deformed; walking wearily through our streets with curved spines; breathing with compressed lungs; the subjects of palpitations, debility and oppressions of the most important functions, which have placed them beyond the possibility of a radical cure. The origin of a vast proportion of these evils would be found in the uncomfortable, unphysiological accommodations of the school rooms, and the erroneous position which, as children, they were consequently compelled to assume. They would be found also in the false fashions originating in the pride or ignorance of mothers at home.

A more perfect knowledge of this science would convince us, that the general and indefinite manner in which posture is sometimes made a subject of remark by parents and teachers, while it shows, that they are themselves only half informed upon the subject, is calculated to exert no influence in producing a reform. Children must be made to *understand* why

a crooked and stooping posture, why the habit of resting on one foot, and lacing the body in tight stays, are injurious to health. Are they likely to be made to understand it, while parents and teachers, who have the more immediate direction of them, are uninformed?

We must do more than simply tell them that they ought to exercise. They should know the physiological reasons why it is necessary. Starting from the point that man was designed, as all the organs prove, to be a laboring animal, they should be made to understand the manner in which labor produces its salutary effects upon the muscles; the heart and arteries; the veins, the brain and nerves; the stomach, liver and other digestive organs. Obtaining in this way clear and definite ideas, they would be more likely to adopt those habits of regular exercise, which a life devoted to literary pursuits requires. Who are so well calculated to communicate this information, as parents and teachers, whose business it is to rear them up for usefulness in life?

I might explain the structure and functions of the eye; its intimate connexions with every part of the body, particularly the brain. You would cease to wonder that the prematurely excessive and unscientific use to which our little boys and girls sometimes subject this organ, in the modern system of education, renders some of its annoying and incurable diseases so common an attendant upon a cultivated mind. A physiological view of this subject would best prove the folly of permitting children to prolong their studies far into the night; and make both parents and teachers look with less complacency upon evening lessons and home tasks. The eyes of few adults are able to support such continued labor. Why should the growing organ of the young be more likely to do it with impunity?

The science of physiology unfolds the numerous evidences of the intimate and reciprocal connexions between the moral and

physical man ; and best ascertains the importance of an harmonious condition of the feelings, the passions and desires, to the health of the body as well as the mind. In its study, we obtain the clearest views of the physical injury that may be occasioned, especially in the young, by the depressing feelings of peevishness and discontent; the corroding influence of envy and misdirected ambition ; and the more stormy passions of anger or revenge. It teaches us, that these, or any of the unholy passions of an ill directed mind, are capable of drying up, not only the sources of happiness, but the sources of life. Seeing this, we become more fully impressed with the great fact, that all modes of education fall far short of perfection, which, whatever advantages they may combine for the advancement of the intellect, overlook the cultivation of the moral and religious feelings.

What new inducements are here presented to parents and teachers, to be sure that nothing exists in the domestic or school arrangements, calculated to kindle or keep alive any of these unchristian feelings ! that all rewards and punishments should be such only as are in harmony with the intellectual, moral and physical health of children ! How important that *they* should possess what they desire them to exhibit — kind, patient, contented dispositions ! that they should never be betrayed by an ill regulated temper, into little acts of injustice, of which children always have so keen a perception ; and which sometimes inflict so deep an injury upon their feelings. How important that both parents and teachers should repress all those unreasonable expectations, and avoid that impatience of spirit which, overlooking the condition, the peculiarities, and the natural rights of children, so often render the school room, and even the paternal mansion, anything but the place of their affections !

Such are the views presented to my mind, by a consideration of the relations subsisting between physiology and education.

The narrow limits of this occasion have necessarily confined us to a very superficial examination of the subject; and only permitted a passing glance at some of the suggestions naturally arising from it. A more thorough investigation would evidently multiply the proofs of its importance to the cause of education; and impress both parents and teachers, with the solemn duty of becoming acquainted with its principles.

The cause of education is eminently the cause of human happiness. It is the cause of liberty and religion. It is the cause of God. It is therefore destined to advance with a progress such as the world has never yet seen. Each generation is expected to look back upon the past, and improve by its mistakes. It is one of the most cheering omens of ours, that parents and teachers are beginning to concentrate upon all these, the only light by which they can be distinctly seen; the light of physiology. The more it is studied, the more its importance will be felt. No other science will so clearly reveal some of the errors that have prevailed in all ages, upon the subject of education. No other will discover so plainly the rocks upon which many have split; and against which, unless they are removed, we also are in danger of stumbling. When its claims are distinctly seen, and rightly appreciated, and the improvements suggested by them generally adopted, deranged health will cease to be considered the probable attendant of a cultivated mind. The school room will be no longer the object of the child's aversion. Learning will present the same attractions to the young, that it does to older minds. A more vigorous, healthy, practical literature will bless the world; and the 'mens sana in corpore sano' will become a more common reward of high intellectual accomplishments.

LECTURE II.

ON THE

CLASSIFICATION OF SCHOOLS.

BY

SAMUEL M. BURNSIDE.

[This Lecture was delivered in 1832, but the publication of it was omitted through mistake.]—Ed.

CLASSIFICATION OF SCHOOLS.

In compliance with the wishes of the committee, at whose request I appear on this occasion, I am to speak of a classification of our common schools, which shall better subserve the objects of education. The duty seems to require, that I should first state the nature, and extent of these objects, although in doing so, I should repeat that, which has been often said before, and with which, every one here is very familiar:—for *one* of them, however, I shall claim more attention, than has been usually bestowed on it, and insist on its importance with more earnestness, than has been commonly manifested by the friends of intellectual improvement. The just development of human nature then, is the acknowledged end, at which we aim in the progress of education. Man comes into existence with physical, moral and intellectual faculties, perfectly suited to the condition, in which his Maker has placed him, and in every respect sufficient to secure the ultimate end of his being. These are to be unfolded, strengthened, exercised and applied to their appropriate uses. The limbs and physical organs are to be invigorated gradually, till they attain their just proportions and acquire their utmost perfection, as auxiliaries to the nobler purposes of the soul.

The mind, in its full energies, is to be brought into action, habitually disciplined, stored with ideas, and urged onward in its never ending pursuit of knowledge. The conscience is to be called to the exercise of its quickening powers, and its dominion established over the whole system of spiritual life; the affections too are to be drawn out in their native tenderness, fervor and purity, and, comprehending the whole circle of human interests, are to be fastened with a force, never to be broken, upon God, the common father of all. These are the objects of education. Their greatness is to be measured, only by our estimate of the immortal mind; by the value we attach to the soul of man. When we engage in a great enterprise, it is desirable to ascertain, as nearly as may be practicable, how far the means we possess may be available to the attainment of our purpose; because the energy and constancy with which we pursue it, will be proportionate to the confidence we have in the sufficiency of those means. It is therefore useful to consider how much depends on human labor, in raising the mind from its feeblest state to the highest standard of knowledge, of virtue, of usefulness and happiness; how far we may be instrumental in fitting man for all the duties of the present world, and for the services and enjoyments of another.

There seems to be but one opinion with regard to our physical and intellectual nature. Whatever change is made in these, is admitted to be the exclusive result of human labors; in other words, of education. No supernatural influence, no special aid from heaven is promised, or expected in bringing the limbs to maturity; or in giving to the mind the strength, the expansion and intelligence, of which it is capable. No one doubts, that for the strength of his arm and the vigor of his body, he is indebted alone, under the ordinary blessing of heaven, to proper habits of indulgence and exertion, formed under the restraints of a friendly control; and no one sees, in the acquisitions of his mind, more proof of superhuman aid,

than in the increase of his farm, or in the fruits of his commercial enterprise.

But upon the moral nature of man, the same uniformity of opinion does not exist. There is a diversity of sentiment among philosophers and divines in regard to its capacity, and still wider difference in regard to the success of human culture in rendering man acceptable to his Maker. There are men, justly distinguished for talents, learning and piety, in whose view the moral nature is diseased in its origin, so that its legitimate tendency must always be only to moral evil. Others, having equal claims to respect, deny this native malady of the soul, but yet maintain that no plan of education, however well conceived and faithfully executed, embracing even all the means, and the motives, which Christianity itself furnishes to affect the feelings and conduct, can ever form a religious character, without some special and extraordinary application of power from on high. Both these classes however admit the duty and utility of education, in reference to the heart as well as the mind; they only contend, that the former will never become holy, as the latter will generally become intelligent through human effort only.

Others there are, inferior to none in splendor of talents and excellence of character, who believe our moral nature to have come from the hand of its author as perfect as our mental and physical powers; and that the same ability, fidelity, assiduity and perseverance, which are often displayed in training youth to intellectual distinction, would with no less certainty, if properly applied, establish religious principles in the heart, and ensure a corresponding practice in the life. I advert to these theories, not because I intend a discussion of them, or even to offer an opinion of their relative claims to approbation: this would be foreign to the subject assigned me, and to the objects of this association; but it is my purpose to contend earnestly, that the moral or religious nature of man, (and in

whatever I say, I make no distinction between them, for I know of none) is a proper subject of school education; that the kind of instruction and discipline, which this nature requires, should form a part, and the most considerable part too, of the system; and that the classification of our schools, to which your attention is to be invited, should be made in view of creating the greatest facilities for imparting religious knowledge, and forming religious habits. If it be true, according to one of the theories I have stated, that piety is the natural fruit of religious instruction, and is seldom, perhaps never produced by extraordinary, supernatural influences, then this department of education assumes an interest, vast as the eternal destinies of our race; and even if we suppose its use limited to a preparation only of the heart for the operation of divine agency, its importance is incalculably great. The condition of our common schools evidently calls for an improved arrangement, which will admit of a more thorough, and more comprehensive course of instruction. In very few only of the country towns in New England, is there to be found anything like a judicious classification. During the winter months, the minors in the several districts are gathered into a single room, in numbers averaging from thirty to eighty consisting of both sexes, of all ages, from the lisping infant of two or three years, to the advanced youth of more than twenty, and all subjected to the care of one teacher. Here, all branches are attempted to be taught, from the first lessons in the alphabet to the grave subjects of mathematics and philosophy, and that within the compass of three or four months. In the summer season, instruction is given by female teachers to a smaller number, and to a more limited extent, but with equal disregard to a division of pupils for separate exercises.

The imperfections of this system are apparent to ordinary observation, and need but little notice here.

Seldom is an individual found, who possesses the talent to

instruct and govern, with the same ease, satisfaction and advantage, the highest and the lowest classes in an indiscriminate collection like those I have described. Both instruction and government, to be successful, must be adapted, with the greatest care and skill, to the age, condition, capacity and disposition of every one, intended to be benefited. This requires a versatility of talent, a peculiarity of tact, if the term be allowed, so rare, that it were in vain to look for it as common, in any grade of character; certainly it were unreasonable to expect it among the teachers of our common schools. But if teachers, competent to these varied duties, were not wanting, there is necessarily a want of proper means of adapting instruction to so great a variety of capacities. Far different are the objects, which attract the infant, from those which engross the attention in riper years; and no less at variance are the prints, the books and images, accommodated to the simple ideas, and first combinations of thought of young children, with the elaborate treatises, and scientific diagrams, and complicated apparatus, which are considered indispensable among the most forward classes. Nor is it hardly possible so to arrange an apartment, as to provide the accommodations, wanted by pupils so different in age, and demanding such different modes of treatment.

The youngest portion want active and constant employment, both for mind and body, suited to their years and habits; but here their whole employment for nearly three hours, consists in once or twice repeating the letters of the alphabet, or spelling out the plain words of a simple sentence. For the residue of their time, they are ordered to sit still, and their only amusement is, to listen to exercises, which to them are as unmeaning, as uninteresting and worthless, as lectures on the Principia of Newton, the researches of Cuvier, or the speculations of La Place. Hence it is, that much of their time is utterly lost; nay, worse than lost; it is spent in idleness, or in mischievous practices, which all the activity and authority of

the teacher cannot prevent. Indolence of mind, sloth of body, hatred of school, and indifference to learning are early consequences of this arbitrary imprisonment, and are often seen to form a part of the character in after life.

But I deem it a more serious objection to this practice of crowding together discordant masses of youth, that no opportunity is furnished, and no effectual provision is, or can be made for moral improvement; the most essential, as I think, of all that enters into a finished education. We do very little; indeed we do nothing, for our country, if we impart knowledge only, to those who shall come after us, and yet fail to cherish in them those feelings, which will turn that knowledge to a profitable account. Already are the duties devolving upon the teacher too numerous to be usefully performed. His whole attention is occupied with mind. The field of moral labor, he has scarcely time to enter, and when entered, he has no means for successful cultivation. It must therefore be left to run to waste, or receive such imperfect culture only, as a few occasional laborers may elsewhere bestow upon it.

Thus is this part of education neglected. I do not say, that this neglect is to be imputed altogether to the cause I have assigned. It originates in public indifference, or at least, in public inadvertence, or in wrong opinions of the practicability of rendering children moral as well as intelligent by school discipline. On this point, public opinion seems to be less enlightened, than it was in the days of our fathers. The education, they sought to give their children, not only embraced the acquisition of knowledge, but extended also to the formation of the heart, and the regulation of the affections. It was not enough, as they thought, that their children obtained an acquaintance with their own rights; they desired to implant in them that love of justice, which should cause them to respect the rights of others; to lead them to cherish that benevolence and patriotism, which should induce them to regard the

welfare, and rejoice in the prosperity of all; to awaken within them, that fear of God, which the wisest man said, was 'a fountain of life to depart from the snares of death;' and that love of God, which should sanctify all their motives, and regulate all their actions. In their humble institutions of learning were reared those great and good men, those patriots, sages and statesmen, who first fanned the flame of liberty on this side the Atlantic; who first detected and exposed the crafty design of a corrupt ministry to enslave their country; who first roused their fellow citizens to manly resistance, when petitions and remonstrances had become unavailing; whose wisdom and valor contributed so largely to secure that independence, which has given their country a respectable rank among the family of nations. But our system is less comprehensive. It is more exclusively intellectual. We act upon the principle, that knowledge is the first object of desire; that this is to be first obtained, that moral principles will spring up spontaneously, and correct habits follow naturally without pains-taking or solicitude. This is an unfortunate error, for its effects may be seen through all our literary institutions, from the infant schools to the best endowed universities. There is cause for regret, that while these have been nurseries of intellectual greatness, it has too generally been thought to be no part of their business or but a secondary part to develope the moral nature of man. The whole course of management in our seminaries seems calculated to lead youth to the belief, that moral virtue is far from holding the first or even a high place in the esteem of their patrons, their instructers or their country. Look through our schools, academies and colleges, and examine the scales of merit which are adopted; it will be seen, that prizes and marks of approbation are generally awarded to the best mental or mechanical performances, whether resulting from industrious application, or constitutional aptitude, or superior endowments; and that rewards are seldom proposed for those, who make the

greatest advances in moral excellence; for those, whose performance of duty is the most punctual, and unremitting; for those, who practise the most self denial, acquire the most perfect self control, and exhibit the greatest integrity, disinterestedness and benevolence; for those, in a word, who manifest most of the spirit of Christianity.

The consequences of this error are such as might well have been predicted. They pervade all the relations of social and political life. Children in our schools, and young men in our colleges soon discover that qualities of the heart are held of less value than the faculties of the mind; that a scrupulous performance of duty will not recommend them to favor, much less to admiration, so readily, as an intellectual triumph over rivals. From such premises they draw conclusions, alike hurtful to themselves, and subversive of the end proposed to be obtained. They grow up to be shrewd, calculating, and selfish; understanding, perhaps, how to get money, how to secure popular favor, in the midst of a people, ignorant, and easy to be imposed on; how to get offices of profit and power, and how to retain them; from the schools of childhood, they carry into the world of business, the lessons, so early taught them, that he is most to be admired, who shall turn his knowledge to the best personal account; who shall raise himself to the highest point of distinction, although in the rugged ascent, he should heedlessly hurl hundreds back to the dead level of humble life.

Hence it is, that in the most enlightened sections of the Union, there is more knowledge than virtue. Well informed men are found to be rather time-serving and subtle, than disinterested and patriotic. And these are the men, whom we most frequently see pressing forward, in untiring competition for political promotion. Officers of trust become objects of ambitious pursuit, and offer to their cupidity temptations to artifice and intrigue. This half-way education is calculated to

make demagogues and sharpers, not patriots and philanthropists. I call it half-way education, because it overlooks one half, and by far the better half of human nature. As well might we restrain the growth of some of the parts of the body, and leave others to attain their natural size, as to provide for the mind only and neglect the heart. The natural monster in the one case would not exhibit more of deformity, and would be less an object of terror, than the moral monster in the other.

I have said, that this defect in our plan of instruction originated in public indifference or inadvertence; and there is reason to fear, that many parents, who do much in support of schools, would exult in seeing their children raised by superior talents, and rare acquirements, to lofty heights of power and renown, even if they should carry with them, hearts, estranged from virtue, and lives, stained by the habitual commission of secret crimes or fashionable immoralities; and that there are not many, who would be satisfied, if their children gained only the reputation of good and useful citizens in private life, although adorned with all the virtues of the Christian character. No wonder then, that such education as we too often give, should fail of its object; no wonder that our disappointment should be frequent, and our mortification severe; no wonder we should often reap bitter fruits from a cultivation so imperfect; no wonder we should have so much cause to lament, that after all our labor, and anxiety, and expense in opening free schools to all classes in the community, they should not always, nor generally become good citizens; that the most talented, and best informed men among us are often found in the number of the faithless and unprincipled; that minds of the highest order, enriched with the choicest stores of learning, are not unfrequently connected with great obliquity of heart, and corrupted by the grossest sensuality; that the bitterest collisions of party are carried on by men of

superior abilities; and that much of the falsehood, calumny, slander and reproach, which prevails in the community, and poisons the springs of social life, is caused by the contentions of educated men, striving, with childish impatience, to reach the highest places in society. Nothing is more true, than that a people will not become virtuous, simply because they are made intelligent. If this truth needs illustration, it is found in the tragic events, which the history of a great nation has recorded within the recollection of many of the present generation. I have referred to the men, who were foremost in resisting encroachments upon American liberty, and establishing the independence of our country, as proof of the character of the schools of our fathers. Let us now turn to France, at the time when she hazarded the dangers of a revolution to correct the long accumulating abuses of an hereditary monarchy, and to the permanent actors in her political changes, who were nurtured in the seminaries of the old world. We shall not fail to learn there, the wide distinction, which may exist between learning and religion; how feeble is the connexion between them; and of how little value, nay, of how much positive danger to human happiness, is the former, when not directed by the latter. These men were not wanting in intelligence; many of them were gifted with uncommon talents. The profligate and daring Duke of Orleans, the selfish and time serving Brissot, the subtle and deceitful Danton, and the ambitious and intriguing Mirabeau were educated men; and the sanguinary and detestable Robspierre, and Marat, and their abandoned associates, though of vulgar origin, had shared liberally in the advantages of an early education. There were multitudes of French gentlemen, who took active parts in the memorable transactions of those days of terror, who had just pretensions to literary reputation. It is said by an English historian of those times, 'that twenty thousand literary men were daily and hourly employed, not as be-

came superior ability and knowledge, in restraining vicious passions, and in teaching the ignorant the way to virtue and happiness, but in exhorting, and stimulating them to outrageous actions.' The leading doctrines taught, were such as might well be expected from such teachers:—'that religion was folly, and its ministers impostors, and were therefore to be disregarded; that every establishment was contrary to natural right, and was therefore to be pulled down; that order was an encroachment upon natural freedom, and was therefore to be overturned; and that property was an infringement upon natural equality, and was therefore to be confiscated.' Such were the pupils, trained in schools devoted exclusively, or principally, to the development of mind, and the formation of manners, and where the moral feelings found no adequate encouragement. Such was the influence they exerted upon society, and such were the lessons they impressed upon the mass of of the people; lessons, which were practically carried out in all the excesses of unbridled passions, in all the licentiousness of brutal indulgence. With what emotions must an American contrast the characters of such men with those of our departed fellow-citizens, to whose labors, and sufferings, and virtues we are indebted for our institutions, our privileges and enjoyments. If we would realize, in the future character of our children, the full fruition of rational hopes, let it be the business of teachers to develope the whole constitution of man; to unfold all the faculties of his nature, bodily, mental and moral; to give to each its proper direction, and so to combine their operations, as to ensure the attainment of a common end, the perfection of being.

This end can be obtained only by a comprehensive course of instruction in a gradation of schools justly adapted to every successive stage in the advancement of a child, from its earliest intelligible exercises to the time, when it may properly be left

to self direction, to select its own elements of combination, and assume the sole responsibility of its own acquisitions.

The first in order, of a public nature, is the infant school, designed to furnish all the instruction, which can be usefully given, out of the family, during the first three or four years in the progress of the learner. I say out of the family, because I deem it a common and dangerous mistake of parents and superintendents of infants, that all instruction and government are to be deferred, till the appropriate age of attendance upon school. The truth is, that much aid may be afforded by those, to whose care infants are confided, before they are prepared for any other school, than that of the nursery. This may be considered as introductory to the first public school. Its usefulness will appear from a moment's consideration of the earliest operations of the infant faculties. When material objects are first presented to the eye, it is evident to those, who are familiar with this period of human life, that there is no variety in the impressions they make upon the mind. The child is incapable of perceiving any distinction between them. The impression is that of a confused mass of something like chaos before the work of creation was completed, 'without form, and void.'

The stars, which form the galaxy of the firmament, are not more undistinguishable by our unassisted vision, than are the substances, which first meet the view of the infant, by its yet uncultivated powers. To make these distinctions, is the first effort of those powers. Here its proficiency is rapid. Long before the organs of speech are sufficiently formed to enable it to utter a word, it well knows the difference between the persons and objects most constantly arround it. Now, whenever the ability of discrimination is seen to exist, the work of instruction should begin. Pains should be taken to direct the eye to new objects continually, as fast as its inclination dictates; not only for the purpose of amusement, but also of increasing

the number of its distinctions, and helping it on, in forming its combinations. In these processes, the attainments and know- of the learner, are generally in advance of the apprehensions of its tutors. It is supposed, that because it cannot pronounce the names, it is ignorant of the classes and uses of the objects which have fallen under its observation. This notion is not well founded, and is, moreover, injurious to the child, because it takes away all motives to assist it in its eager desire to extend its acquaintance with this delightful world of novelties. For many months, nature is left to her own movements, under a belief that the child is not old enough to be profited by assistance. But it may be safely affirmed, that in the first two years, its knowledge may be more than doubled, and also the sum of its enjoyments, by timely attention to its intellectual wants. The first moral exercises are those of love, gratitude and sympathy ; the sense of right and wrong, the earliest indications of conscience, are also simultaneously exhibited. With the utmost care should these be drawn out, enlarged and well directed. If this management of children, in this first part of their education should fortunately devolve upon those, who possess a competent share of intelligence, of judgment, and sense of religious accountability, upon those, who would bestow the same pains upon the mind and the heart that are usually taken with the limbs, then little pupils would be well fitted, in two years, to enter upon a more extended course of improvement in the infant schools. I do not forget that with family education the public have no right to interfere, and that the duty assigned me may be thought to be more properly confined to those schools only, which are under the public direction.

But in the business of education, as in every other, the most important step, is the first one; ultimate success much depends upon a right commencement of that plan of instruction and government which is to carry forward the mind to its

maturity. By government, I mean only direction and control, by whatever means the one is given, or in whatever mode the other is exercised; it is as necessary to the infant of six months as to the child of six years. Now although the public may not interfere in the concerns of a family, it may do much by bringing the subject under the notice of parents, by urging the advantage of beginning instruction at home, with the first appearance of attention or curiosity in the child, and by useful suggestions of the manner and the means, by which its advancement may be accelerated. In the infant school, the pupils are no longer to be confined to the objects, usually found within the walls of a single room. A more extended view of nature should be allowed them. The vegetable, the animal and mineral kingdoms may now be opened to their examination. Here, as in the family school, the first portion of their time is to be passed in learning, by inspection, the different kinds of objects which are yet new to them; the various species of vegetables, animals and mineral substances, which engage their notice, and interest their feelings, their nature and uses, and modes of production. Such things as cannot be pointed out in their natural state, are to be represented, by paintings, engravings, and images, accompanied by necessary explanations. In this school, everything should be so arranged and conducted, as to amuse as well as enlighten the pupils. To this end, the room occupied should be neat, comfortable and commodious, containing nothing which may not tend to excite emotions of pleasure, and lead to profitable inquiries. It would be of incalculable benefit to an infant school, if there could be connected with it, a garden, containing convenient walks, and a variety of trees, flowers, plants, and other vegetables, calculated to please the senses, cultivate the taste, and keep alive the interest. Much of their time might be usefully spent in ranging through it in the open air, freely asking those questions, which the productions of the season

would suggest, and listening on the spot, to such statements and communications as would readily occur to a well qualified teacher. Indeed, there would be here but little else for the teacher to do, than reply to inquiries; for here too, as well as in the nursery, the observation of children is more extensive, and their impressions more vivid than their instructers are apt to imagine. I deem it not extravagant to say, that if no other attempt were made to teach children thus situated, than to give proper answers to the numerous questions they ask spontaneously, then knowledge would exceed the amount acquired in the usual manner. Yet it often happens, that little children, when they ask questions, in all the eagerness of a praise-worthy curiosity, are discountenanced, repulsed, and even reproved, through the indifference, the ignorance or indolence of those, to whom they have a right to apply.

The principal gain in an infant school, so far as mind is concerned, is to make them acquainted with the greatest variety of objects, and form them to habits of generalization. Here reading is begun, and should be continued until the pupils are able to pronounce easy words without spelling. But religious education should here hold the first place. Here should begin, and be continued if begun before, the application of those moral means, which so easily operate on the susceptible heart of youth, when not depraved by the corrupting influences of a vicious world. It is now open to receive any impressions which may first be made upon it. It will receive good and bad ones with facility; and upon the nature of those it does generally receive, will depend the future character.

And although experience forbids the hope, that any painstaking will exclude all injurious influences; although some hidden causes and accidental circumstances, which human foresight cannot anticipate, and human vigilance cannot control, will sometimes counteract all human endeavors to keep the

heart pure ; however certain it is, that temptations from without, and turbulent passions within, will find place in the heart, and sometimes destroy the soul ; we yet may reasonably believe, that moral education timely commenced, and perseveringly carried on, will raise up a generation, who shall be 'a peculiar people, zealous of good works.' For this department of education, infant schools are best adapted. Here the children are withdrawn from the contagion of evil examples, and saved from the consequences of early idleness, and wholesome food is provided for the mind as well as the body. This alone, is doing much to secure their virtue. But here, opportunities are never wanting for presenting religion in her attracting forms, enthroning her in the heart, and subjecting the affections, the passions and the will, to the government of her laws. In answering the oft repeated question, what flower is this ? what is its use, and what makes it grow ? how easy to raise the thoughts to God ; to dwell upon his paternal character ; his claims to the love and obedience of his creatures, the duties he enjoins, the punishments he threatens, and the purposes of life, and the destination of man.

How fit are these occasions to inculcate the precepts, and instil the spirit of Christianity, to impart that 'wisdom from above, which is full of mercy and good fruits.' I cannot forbear urging the necessity of seizing these critical moments for awakening religious feelings, and establishing correct principles, because I consider it a truth, founded in the philosophy of mind, that habits of early growth, and of long continuance become so deeply rooted, as to constitute a second nature, and like nature herself, resist powerfully all efforts from without or within, which aim at extermination, or a radical change. The most aged observer of human actions will bear witness, that an essential change is rarely effected in habits, which have acquired the accumulated strength of forty years ; and the minister of religion will tell us that he is less frequently instrumental

in converting from the error of his ways, one grown old in sin, than in gathering seals of his ministry among the younger classes of his flock. If then, moral improvement were the only benefit to be derived from schools of this description, it were abundantly sufficient to recommend them to public favor and patronage. From these, children should be raised, upon examination, to those of a higher character, which may be termed primary schools. In this class of schools moral and intellectual culture are to be continued with equal care. The appropriate pursuits are reading, spelling, punctuation, abbreviations, figures, and the elements of geography, together with such moral exercises as are best adapted to the age and condition of the pupils; and whatever rewards and punishments may be thought necessary, should be so applied as to promote the progress of Christian virtue, as well as sound learning. Thus far, the sexes may be taught together, without impropriety or inconvenience. But in the schools which succeed the primary, both propriety and convenience demand a separation. When it is ascertained, by examination, that one or more members of a primary school are well versed in all the studies of it, they are to be transferred to one of a still higher grade; the males, to an English grammar school, under the care of a master; the females to one of equal rank, taught by a mistress. In these schools respectively, they attend to reading, orthography, writing, arithmetic, through the fundamental rules; commence history, and continue geography, with the use of a terrestrial globe; devoting such time, and renewing such instruction on moral subjects, as the superintending committees shall think proper. In this, and every other class of schools, the high purpose of education must be kept steadily in view; the impression should be deep and lasting, that the privileges and advantages they offer, are not designed so much to enable youth to amass wealth, to acquire power and personal reputation, as to fit them for usefulness to their country and

mankind. The last grade of permanent schools required to complete the course of what is called a school education, is a classical school for boys, and a high school for girls, to which they are to be admitted, upon examination, from those I have last mentioned. In the classical school the branches are similar to those taught in academies. In the high school, in addition to the studies of the schools below, the course will comprise all others, necessary to prepare females for the situation in life, in which they are likely to be placed. These will be more or less extensive, according to the prevalent opinions of society on this subject. They will probably include ancient and modern geography, the elements of rhetoric, of natural philosophy, chemistry, geometry, and astronomy. An education to this extent fairly satisfies all claims upon public bounty. It is enough, if the State provide means for qualifying its children for all the duties it requires of them. If they aspire to higher attainments, it must be from considerations of personal advantage, and these must be sought at private expense. If fidelity and ability be manifested in all the inferior schools, the instructers in the two highest, will find it neither difficult nor unpleasant to finish satisfactorily a course of instruction, begun so auspiciously. Then pupils do not come to them from the retreats of ignorance and vice, but through a gradation of well organized schools, and bearing the testimony of successive committees to their proficiency and good conduct. They will therefore send into society, at short intervals, youth, well informed on all subjects of practical utility, with habits formed under the influence of Christianity, with hearts guided by the spirit of religion, and with fixed resolutions of honoring, by active and well regulated lives, that country, to whose munificence they owe their elevation. Such is the classification of schools, I would recommend to public consideration. I do not propose a doubtful experiment. It has been tested, for more than eight years in the

village where I reside, to the satisfaction of the people. Though less perfect than it might be, (for I have described it rather as I would have it, than as it really is,) and though less efficient than we hope to make it, it has nevertheless more than realized the hopes of its projectors. It has been found to possess high claims to preference over all former systems. The studies and exercises of each school are appropriate to the age and condition of the members, and their ambition for promotion from one rank to another, is a pledge of their industry, their proficiency and correct deportment. This gradation could not indeed be carried, to equal extent, into the sparsely settled districts of the country; but to some extent, it may be adopted everywhere.

In every district, there may be, at least, a primary and an English grammar school; the former to include children from two to six years old, under the care of a female, and the latter to contain the older children of all ages, under a master.

This division need occasion no increase of expense, except for an additional school-room, accommodated to infant instruction; for should it cause an abridgment of time, it would ensure more than a corresponding amount of improvement.

The experiment is worth a trial in all places under the countenance of this association. There are three other schools, of a peculiar nature, which do not fall under either of the classes I have stated, but which I cannot forbear to mention as essential to a complete system. One for the children of free people of color, when their numbers are sufficient to constitute a separate school. This is due to that unfortunate species of our fellow-beings, whose lot is cast among us. They have little reason to thank us for giving them freedom, if we withhold from them the means of learning the value and end of freedom. You have conferred but a slight favor on this degraded race by removing the bonds, which made them your slaves, if you leave the mind and heart still in

bondage to ignorance and sin; it is only when they have a competent share of knowledge, are induced to practise Christian morality, are enabled to comprehend the sources of the Christian's joys, and indulge the Christian's hopes, that they can justly be called freemen. If then we cannot restore them to the land, from which their fathers were torn away, let us do what we may to render them here comfortable, useful and happy. A temporary school is also wanted for apprentices, whose indentures do not admit of more than two or three months' attendance annually. Their condition requires a kind of instruction, and a degree of attention, for which the permanent schools are not suited, and which they could not furnish without serious injury to the regular scholars. The last seminary to be mentioned, though second to none in the benefits it confers, is the Sunday school. It is the offspring of private benevolence and liberality, and cannot be named, but in terms of strong commendation. It is principally, and in some places, exclusively intended for moral instruction on the Sabbath. It is therefore the rival of none, but the auxiliary of all. It includes the members of other schools, and opens its doors to the poor, the ignorant and vicious of every condition in society. It is an asylum, in which the orphan, the friendless, and neglected children of every grade may gather strength from the fountain of moral life; and a place of refuge, to which the thoughtless wanderers in the broad road of ruin, may fly for counsel and safety. Upon no plan of operations for the good of mankind, has heaven smiled more benignantly than on this. In the new settlements of our country, its value is directly seen in the mental attainments, the correct feelings and religious knowledge of the pupils. It rescues the Sabbath from profanation, and religion from reproach; even disorderly parents are sometimes shamed into seriousness and regularity of conduct, by the better examples of their own children.

I have thus endeavored to bring into view, a series of schools, gradually ascending in dignity of character, from that which receives the inmates of the nursery, to that in which a common school education is completed.

It is one, which appears to me to promise most aid to the learner in every stage of his progress, and to unfold most surely all the faculties of his nature. If there were no other consideration, its cheapness would entitle it to public notice and experiment. The whole number, with the exception of three, are best taught by ladies, under the constant supervision of a board of overseers. In the village of Worcester, six out of eight permanent schools are ably and acceptably instructed by ladies, the amount of whose wages is twentyfive dollars per week, including their personal expenses; being an average of two hundred dollars for a year. But I consider its advantages for moral education as forming its highest ground of preference. I cannot claim indeed for those, to which I have alluded, an exalted moral standing, not because their arrangement is not favorable for it, but because there is wanting there as well as elsewhere, moral courage enough to insist on such instruction and discipline as will ensure it. The only objection I know to exist, arises from the discordant opinions of the religious sects, which abound in the community. To this objection a satisfactory answer was furnished by the eloquent gentleman, who immediately preceded me in this course of lectures; — 'There is common ground enough for imparting to youth all necessary religious instruction, without disturbing the peculiar doctrines of any sect of Christians.' To this just sentiment, I may be pardoned, I trust, for adding my own belief, that this ground is also spacious enough for sincere Christians of all denominations to walk together to that future world, where the distracting controversies of this will never enter.

But our desire is only to train children to the practice of Christian virtues from Christian motives; that is, from reverence of God, an habitual sense of his perfections, his presence, and of personal accountability, and from a love also of country, and the whole human family. To make them theologians or metaphysicians in these seminaries, is neither necessary nor practicable. This is all I mean by a religious education, or a religious character, and whatever more is attached to these terms by others, it will not be denied, that such a character is all that is wanted for the concerns of this life, and I would humbly trust, that it is some preparation for a better.

Let us labor to form it in our schools. If we succeed, as succeed we shall, and if our schools should be planted, as we believe they will be, in every country, and in every village in this world of mental and moral darkness, what will be the character of future generations, compared with the present? Now, about one fourth only of the habitable globe is claimed by Christianity as nominally her own; and of this portion, how comparatively small is the number, who make the world better by living in it? But under such influences as this Institute is able to exert, the reverse of this may hereafter appear; the great mass of mankind may be as intelligent, as pure, and as free, as it now is degraded, oppressed, and criminal.

LECTURE III.

ON

PRIMARY EDUCATION.

BY

GARDNER BRAMAN PERRY.

PRIMARY EDUCATION.

The word Education in its full extent comprehends every influence exerted upon a person from his first moment to the closing scene of life: would you see a full exhibition of the power of these influences, go to yonder mansion and look on the child of yesterday. It has life, and the animal functions are going on, but knowledge to discern, or power to administer to its own wants, or even ability, with much distinctness, to make them known, it has not. Let the tender care of her who gave it birth be withdrawn for a few short hours, and its connexion with this world will come to a close, and its remembrance among men will perish. Hasten with it to the forest, and place it in the wigwam of the red man, and if it survives, which the hardiest alone can do, the severities which will meet it there, he will grow up erect and active, quick of sight, fond of the chase, and fonder still of war. Put him among the children of Ishmael, and he will become a wandering Arab, with his hand against every man, while every man's hand will be against him. Let him have his training in almost any part of the Eastern continent, and he will be for cast, orders, and distinctions among men. Emperors and lords and subjects and serfs will, in his ear, sound like the ordinances of heaven.

Let him dwell among us, and he will acknowledge no distinctions but those of acquired worth, and no superiority but that which better actions confer. Put him among the rich, and he will need equipage and attendants. Place him with the poor, and those who will pay his hire may have his services. Class him with the middle orders of society, and he will be too independent to need a servant, and too noble himself to become one. Set him afloat on the world, and his particular attachment to place, to friends, and even his social feelings will be lost. A sinking void will be experienced in his heart, he will live a wandering, joyless life, and at last go down to the earth without regret and unregretted. Let him remain in the excellent family where heaven has given him birth, and his bosom will soon begin to heave in tenderness, and his heart to beat high at the pleasing sound of parent, brother, sister, friend; he will love his home, his mental and moral powers will open, and he will begin to multiply the comforts of that home, as well as to receive into his own bosom large portions of the varied happiness which there abounds. Carry him to the city of the Grand Sultan, and he will grow up a worshipper of Mahomet, and exhibit all the peculiarities of one of his most devoted sons. Let him live where the gospel sheds its benign and enlightening rays, and he will embrace the doctrines and rejoice in the precepts of Jesus.

Such is the controling influence which external circumstances must and will have upon all other children. And these external circumstances are nothing more nor less than the concentrated influence, the whole education through which a person passes, and by which he will be benefited or injured, in proportion to the healthful or baneful nature of the sum of this influence.

Of what unspeakable importance then, must it be to this heir of life and immortality, that this influence should be enlightening, elevating and moral. In this, however, the one to

whom I have directed your attention is not singly concerned. There are ten thousand other children at this moment in this our happy land, whose future condition is equally as much under the control of circumstances. And there are ten thousand more, who, though they have lived long enough to acquire some knowledge to discern, some discretion to regulate, and some power to assist themselves, have yet so little knowledge, wisdom, and discretion, that, like the tender plant before the driving wind, they are liable every moment to be prostrated and carried away by public opinion and general practice. The oldest, and wisest, and strongest cannot altogether resist its influence. The rising generation, like clay in the hand of the potter, are readily moulded into almost any shape, and will most certainly take the form, adopt the principles, and fall into the habits, which the all fashioning power of education, comprehending under that term whatever in the world around them operates on the mind or heart, shall give them. Of the direct and overwhelming interest which all have in this subject it is not easy to imagine, much less to speak. The whole future condition of the rising generations, in all their mental, social, and moral interests, their present and future joys and sorrows, is involved in it. Even those of us who are now upon the stage are scarcely less interested in it, for in a few more years, if alive, we must be thrown upon them for every enlightened and kind attention, which the debilities of growing years will make necessary and comforting to us. Nor will it stop with us. It reaches forward to generations still to come, whose mental acquirements, whose social feelings, whose moral principles, whose religious institutions, literary advantages and civil rights, to a very important extent, must be what is handed down to them by those who came before them.

On a subject whose influence is so deep and wide and stirring, it is not possible we should feel too absorbing an interest, or direct our thoughts and inquiries too frequently to it. And

I cannot help considering it among the most encouraging circumstances of the present day, that there has been called up so general and operative attention to this subject. And among the many institutions to collect information, diffuse knowledge, and help forward the work, I have from the commencement regarded the institution now assembled as among the most wise and efficient, and therefore say, 'prosperity be within thy gates.'

Among the causes which operate with such fearful power upon human character and human conduct, school education holds a highly interesting and important place. The period of life in which children are at school, the time they pass there, the employments which occupy their attention, the associations into which they are brought, the sentiments which are inculcated and the control exercised over them, with many other circumstances more or less obvious, all concur to give the school education a most important bearing upon their future lives and prospects.

While I feel confident that I have your enlightened assent to the justness of this last observation, you will permit me to hope I may be favored with your candid attention, while I make some remarks upon the principles and manner in which it should be conducted. For to this, I suppose the Directors referred, when they assigned to me the subject of primary education.

The subjects to which I shall now particularly, though not exclusively, refer, are,

1. The connexions in which children should be placed when at school;

2. The buildings;

3. The parts of knowledge to which their attention should be directed;

4. Upon what principles their books should be prepared;

5. In what way shall order, attention to books, and good moral principles be secured.

It may be well to observe that in the discussion of these particulars, I have not labored to keep up a very nice distinction between them.

Beattie, in his Reflections upon Moral Science, observes that in a public school, there are superior opportunities for acquiring habits of activity, and a free and manly behavior, with a knowledge of the world and of human nature, as well as of making valuable connections in the way of acquaintance and friendship; while in private education, we may expect more modesty and innocence, fewer temptations to irregularity, and less danger from bad company.

If these remarks be just, and I must suppose they are, then it is very certain that neither course alone meets the necessity of the case, whether we regard the good to be desired, or the evils to be shunned, and therefore that in training up the young, neither can with propriety be exclusively adopted. It is by uniting the advantages of both in such a way as to exclude, as far as may be, the separate evils of each, that we can secure the best education, or most effectually prepare youth for the business and obligations of subsequent life.

If 'modesty, innocence, and a comparative freedom from temptation,' are the advantages of a domestic education, it is certain that in training up the rising generation to future life and usefulness, family influence may not be dispensed with.

The family connexion is an institution of Heaven, and must be ranked among the wisest and most benevolent provisions of a kind Providence for the welfare of man. It is suited to his necessities, and has done more to improve and preserve the morals, elevate the character, and increase the enjoyments, than any or all other institutions together. The intercourse of its members tends alike to develope the understanding, improve the morals, and awaken the benevolent feelings. A bland and softening influence is there exerted and enjoyed, which goes very far to originate, encourage and confirm virtuous resolution

and correct habit. Though we have reason to mourn over the perversion of this institution, and the imperfection of conduct, which often exist there, still it may with truth be said that the original designs of our Creator are more fully realized in this than in most or any of his gracious provisions for our benefit. In many families there is an all pervading and controling influence, in favor of good order, honorable and fair conduct, and just sentiment and feeling, while there are very few so far gone in debasement, but some restraint is put upon vice, and the ugly and hateful passions of the heart.

Every family is a little republic where many of the social duties and obligations are first felt and practised, and under circumstances favorable to correct sentiments, in relation to them. Here authority is exercised with gentleness, because it is possessed without usurpation, and obedience rendered without servility. Here the first ideas of common right and mutual obligations are acquired, with a conviction of the reciprocal benefits of order, industry and carefulness, as well as of accommodating manners and kind offices.

Here also the young and tender efforts of genius, enterprise and skill meet with the liveliest encouragements; here success receives the most salutary, because unerring applause; where failure is consoled with the most sustaining, because untriumphing pity; here virtue meets its true reward in the approbation it receives and the comfort which is seen to attend it, in respect to all around, and vice its most severe rebuke, because it receives the reproof of humbled and pitying regret.

This is a place where the ignorant come without apprehension for instruction, the weak for assistance, the afflicted for pity, those who have fallen into difficulty for advice and help, those that have been overtaken with crime for restoration.

In this place too, instructions are given on subjects of every day and pressing interest, connected with the health or safety of individuals, with a distinctness, particularity, repetition and

application which can nowhere else be looked for, and indeed which nowhere else would be received with such feelings as would promise the best good.

Of the great and numerous advantages of this institution, no one can be altogether insensible, nor can it have escaped the observation of any one, how much many youth have suffered in their social feelings, their morals, and general conduct, who have grown up without its benign and happy influence. As a general remark, the morals of men, the quiet of neighborhoods, the prosperity and safety of nations, the general peace and happiness of all, bear a pretty exact proportion to the regard which is paid to this institution, and the extent to which its sanctifying influence is enjoyed. And did time permit, the justness of this observation might be sustained, I apprehend, by many striking and convincing facts.

If these observations be just, how certain it must be, that the benefits of family influence cannot be dispensed with, in the education of the young, without great danger to their minds, morals and feelings; and as an inference from this, that every system of education should be regulated, as far as can be, with reference to the salutary influence of this institution, and the whole conducted, as far as may be, upon such principles, as to infringe, as little as possible, upon the common intercourse and connexion of the family circle. The object should be, not to draw children from home, but to keep them there. More undivided attention to books, and a greater mechanical conformity to the regulations of school, may be secured by calling youth into one place, and feeding and lodging them in the same apartments, and the facility of simply managing a school, considerably increased; but this is gained at the sacrifice of far greater things. In this way, children lose the knowledge and experience, which the common and every day occurrences of real life are calculated to give, and which, while it is of the first necessity, can be obtained fully in no

other way, than by an opportunity to observe them as they come along from time to time in the business of life. While theories and habits are formed, as ill suited to the form and reality of things, as the state and condition where they are imbibed is itself mechanical; at the same time, also, many of the tender and social feelings remain uncultivated, because there is no opportunity for their exercise; while under the operation of laws and restrictions adopted for temporary and specific purposes, the genuine and permanent motive to a virtuous and useful life remain inactive, and therefore unstrengthened. Cast your eyes upon the world, and in its history, learn when and where, in the course of education, youth have most frequently been drawn off from the paths of virtue, and commenced the wayward course. Was it when under the restraints of home, or when removed from this most happy influence? What is it that raises so much distressing solicitude and fearful anxiety in the minds of parents and friends, when about to send their children from home, to the public places of learning, but the too well recollected history of the many promising youths who have found their moral death there? And whence comes the danger of these institutions? Not, surely, though perhaps many have thought it, because there is a worse positive influence exerted there, than is exerted in society generally. As a general observation, the reverse of this is true; most of the youth brought together in these institutions are from the better and more moral families, and have themselves enjoyed more than common opportunities for moral and religious instruction. The officers and instructers are, mostly, worthy, pious and watchful men; the laws and regulations are strict, and many of them wise; the course of study is such as is naturally calculated to produce a moral and elevating effect upon the mind and heart. Many of the more deceitful and powerful temptations of the world are removed. And yet how often are those, placed in these institutions, led away and

enticed. Various causes, no doubt, operate with more or less force, to produce this melancholy result, but after some opportunity to observe, and many inquiries, I am constrained to believe that the grand and most powerful and general one is the want of the restraining and restoring influence of family and home.

In speaking of the importance of family influence in training up the young, and the propriety therefore of keeping them as much as is practicable under its influence, I should still fail of presenting the subject in its full light, did I not add, that this arrangement is almost as important to the parent as to the child. Its effect upon them is often deep and powerful, constant, and always salutary. The obligations which parents most generally feel to train their children to habits of virtue and good conduct, operate powerfully upon themselves, as a restraint to keep them back from what is vile, and as an excitement to an upright and worthy conduct. While their daily intercourse with them operates powerfully to soften their feelings, refine their manners, wear away asperities in their feelings, to calm and refresh them under the fatigues, perplexities and provocations of life. In my estimation there can be no doubt but that the same person will generally prove more consistent and upright in his general conduct, who lives under the restraint, which his own sense of propriety lays upon him, while his family is around him, than he would were this restraint for the most part taken away.

It will not, I hope, be regarded as an improper digression from the general object of this address, while I take an opportunity to observe that a principle is suggested here, well worthy the attention of those who have the management of institutions designed to give education to the children of the vicious or the indigent. No doubt, instances may occur, where the only rational hope of forming the children to habits of morality and industry, is in removing them from their

homes, and the pestilent instruction and example to which they are there exposed. Still I am deliberately of opinion that those instances are much more rare than many have supposed. The removal of children from their families, though often attended with great immediate good effect, and not unfrequently with lasting advantage, still fails of that wide and varied salutary operation, for which Heaven has provided in the family institution. It removes one of the natural restraints which Heaven has put upon vice, and so, not unfrequently, corrupts the parents, while it may reform the child.

That much is effected, when children are taken away from vicious and corrupt families and put under the restraints of some charitable asylum, is most readily and thankfully acknowledged. While the exertions and sacrifices made in this course cannot be too highly valued, nor can we be too thankful for the success which has followed these exertions, still I must believe that in a great majority of cases, the same pecuniary advancement, the same personal exertion, and the same moral effort, would have resulted if not so immediately, yet ultimately, in a much wider and more permanent good, had the children, while under this moral influence, been permitted, if not from day to day, yet very frequently, to return home to their families, with their minds filled with the instructions they had received, and their hearts impressed with the moral and religious obligations presented to them.

But whatever may be the part of wisdom in such institutions, no inference can be drawn from it to justify the withdrawing children from under family restraint, where this supposed necessity does not exist. For originating and sustaining moral sentiment and kind feelings, there can be no substitute for family influence and family government. The history of the world gives a full and unanswerable support of this declaration. And the more any one shall turn his thoughts to the subject, and the more extensive his investigations, the

more perfect will be his convictions of this truth. Every other institution designed to take its place, however wisely planned and however faithfully attended to, is but second best, and may with propriety be resorted to only when the family fails to answer the end of its institution, through the fault of its members, or when individuals, through the providence of God, are deprived of its influence.

To prevent misapprehension here, I will stop to observe that it is not intended by these observations to imply that it is improper or unsafe, for the purpose of education, to put children to board in good and regular families; for in this way, the child may be nearly or quite as well provided for, because under as good an influence as at home, the same principles being made to bear upon him.

But what I do intend to say is, that it is not safe, certainly before the habits of self control are formed, to put them in places, where, from the system adopted, or from the numbers collected together, the common order and arrangements of families are broken up, and that it would be a great and important improvement upon the whole system of education, could arrangements be made, to have youth, during the whole course, kept under the influence and government of the family system. While I regard, however, the family influence of such indispensable necessity, and in its operations so favorable to the mind and heart, I am more fully convinced that it is not of itself sufficient to qualify men for the business and responsibilities of life.

The business and responsibilities of men are beyond the family circle; they must go out into the world, and become subject to its influences, and bear a part in its concerns. That education alone meets their necessities, which fits them for this. And this education can never be obtained adequately, when confined and shut up under the paternal roof, or made a recluse within the walls of a seminary.

A man must know the world if he will act with effect and propriety in it. And this knowledge in its true and legitimate sense is of indispensable necessity, and, at the same time, of difficult acquirement. Something of it may be acquired from books, more in the family circle, and the frequent calls of friends, and the common intercourse of social life. Still the acquisitions made in this way will be limited and imperfect, and quite inadequate to the exigences of future life. The child, too much shut up in his early years, sustains a loss which no subsequent exertion can ever repair. He may, it is true, like those who commence a course of public education late in life, become altogether respectable, even great and distinguished, still he must feel much below what he might have been, had he been placed under more favorable circumstances. Opportunities to acquire this knowledge cannot be given too early. It is of every day, and everywhere utility. Something of this, as I have observed, may be obtained from books, but nothing teaches effectually, fully, and practically, but an actual intercourse with our fellow-men, a participation with them in the every day business and occurrences of life. To me it does not seem strange, that an active man who has spent his life among his fellow-men, should acquire an influence in all public concerns, which his book-read and secluded neighbor, though in a sense, knowing a hundred times as much, could not attain. The latter can act with energy and wisdom with Alphonso's dead friends, his books, for he has made himself familiar with their character. The latter can only act with the living. The superior practical wisdom and common sense understanding of those whose minds have been excited, whose opinions have been corrected, whose prejudices have been removed, whose exuberances have been pared down, whose self-will has been restrained, whose pride and arrogance have been humbled, by contact and collision with the busy, active, thinking world, when compared with those who have

kept aloof or removed from these things, cannot have escaped the observation of any one.

If children are to be trained for future usefulness, they must be brought early into contact with the world, that they may catch a knowledge of 'the living manners as they pass.' Under what circumstances this shall be done, so as to obtain the good and avoid the evil, is a subject of nice and anxious inquiry, but one which the object of my address will not permit me fully to discuss. No one course would probably meet the exigences of all. The most careful arrangement and circumspection on the part of parents and friends, an eye quick to discern, and a hand skilful to guide everything connected with this business, is most imperiously demanded. For the mind and heart of children are, like the finest and most delicate mechanism, liable to be disordered by the least violence or improper motion. That wisdom which is from above and is profitable to direct, if anywhere, is needed in this business.

But when I do not undertake to give a full answer to the inquiry, in what manner children shall be brought into contact with the world, I have no hesitancy in observing that we have, in our public schools, one happy and convenient place of doing this. By public schools, I wish to be understood as referring to those which are maintained by the people of this Commonwealth, agreeably to the requirements of law, and such as are supported by public or private munificence or enterprise, for the benefit of the young and rising generation. In these institutions we, of the country, enjoy almost universally what many writers on education in the old world seem to have supposed could never be enjoyed except by a favored few ; that is, a public school for children, while they are still kept under the influence of family restraint.

Among the circumstances which recommend these schools as suitable places to commence the training of youth to the knowledge of the world is, that in them their exposure is in a

degree proportioned to their moral strength, for almost as soon as a child is out of the sight and direct influence of home, he falls under the inspection, counsel and instruction of his teacher, and has presented to him, in the business of school, many strong and suitable inducements to studious habits, and a moral life. He is brought, it is true, into new connexions, and there are new temptations to folly. But it must be remembered that there are new inducements to a worthy and upright course.

In these schools, for the most part, are collected together children with whose manners and conduct the parents are generally well acquainted, and therefore they have it in their power to caution their children against the temptations which they are likely to meet, and the sins, into which they are most liable to be led. This prepares them beforehand to avoid or resist the dangers which lie in their way. The return, too, of the children every day or half day to the bosom of their families, where they may be enlightened, encouraged, strengthened or reproved, as circumstances may require, gives increased security in this mode of bringing children before the world.

In these schools too there is excitement enough to rouse to activity, emulation enough to secure attention, and equality enough among the several members to bring down that self complacency and hateful pride, which too often exhibits itself in those, who, knowing the attainments of none but themselves, are ready to suppose they have few equals, and no superiors.

In these schools are children of different ages, education, temperament, inclinations and pursuits. A wide field of human character is spread out before each, a little world, from which they are to gather a knowledge of men, and upon which they can exercise their own skill and power to influence and control.

In these schools too, children of both sexes are brought

together and made to take part together in the studies and exercises of school — a circumstance which, under good regulations, cannot, I apprehend, fail of the happiest effects upon their feelings and manners. I am perfectly aware of the public sentiment which, to some extent, I have to encounter in this remark. I believe, however, I stand on safe and tenable ground. The intimations of Providence are safer guides than the conventions of men, and those, I think, I have distinctly on my side, and that the history of the world is full and clear on this question.

Another consideration which recommends these institutions is their reflex operations upon the parents and other members of the family where the children reside. What children learn at school they will talk over at home. Their books also they will have about them. Often they will wish to recite their lessons, and seek for explanations. All these circumstances operate constantly and powerfully upon the family, to waken curiosity, to lead to investigation, to increase knowledge, and keep in remembrance what is already known. I do not know that it is any more matter of boasting to say that one is fond of books, than to say that he is fond of agriculture, trade, or commerce. I shall, therefore, be permitted to say that I am fond of books and of reading, and yet when that part of my family who are in the progress of education are for any considerable time from home, I feel sensibly the loss of excitement which their continued inquiries and observations create, and I presume that most of those present, whose great business is with books, would be ready to make the same observation. If such be the case with those thus circumstanced, how eminently important is this excitement to those whose means of improvement have been no better than that of the great body of the community. It is not easy to conceive how much information these schools carry into every house; what desirable changes they produce in the conversation, manners and

conduct of families, or how much more elevated, is the state of society in all our neighborhoods and towns, than it would be without them; or were the children, during the progress of education, shut up, as some would have them, in a private chamber, or what, in this view of the subject is still worse, confined within the walls, or upon the play-grounds of some public seminary.

Temptations to folly and vice will, no doubt, assail them here, nor should the eyes be blind to the danger that they may be drawn away by them. But there are dangers in every situation of life. If they come not from without, they will come from within. Sooner or later, those who are to have part in the business of the world, must come in contact with it. And for this they ought to be prepared. The only question is, considering the object of life, how children can be trained up in such a manner as to have ability to foresee and avoid temptations, or power and dispositions to resist them when they come. Now it appears to me that this object will be best effected by early bringing them into the community of those as young and unfashioned as themselves, where the influence of parents and instructers are ready to second the disposition of the child to maintain moral and upright conduct. And with these views, I must think that our public schools, spread though the community, afford favorable places to begin at an age when they are commonly placed in them, to train children to the knowledge of the world, and to make them acquainted with temptations with which they are likely to be assailed, and to train them to habits of resistance and victory over them.

I know well the almost insuperable objection which many persons have to putting their children into such schools. And there may be times and places, when and where these objections are rational. But upon general principles, I appre-

hend it is the result of a morbid sensibility, having really no just support in the intellectual or moral necessities of men.

These schools are emphatically among the glories of our land, and no providence of God should be acknowledged with higher sense of gratitude, than the one which carried our pilgrim fathers to Holland, where they first received the idea of such institutions, and no spot on earth should be contemplated with deeper interest for any public act performed there, than the town where this system first went into operation. It is rightly named Salem, for in giving light and knowledge, it has taken the most effective method, in the end, to give peace.

I have therefore no hesitancy in recommending that children, in the early part of their education, be placed in these schools. Reasons, operating in particular places, and with individuals, may require a departure from this course, but I am persuaded that these are much less numerous than the morbid sensibility of many persons leads them to suppose.

Upon the simple principles of association, it is important that there be nothing unpleasant, gloomy, or forbidding, in the situation, or in the buildings themselves, where, at the age of deep and easy impression, children are collected for the improvement of the mind, the feelings, or the heart.

There are reasons, however, if not of greater importance, yet more easily understood, — reasons connected with the growth, shape, strength and health of the body, and the development of the powers of the mind, and the feelings of the heart.

Upon an average, it is supposed, that the children of this Commonwealth spend at least six years in houses of education, in getting what is called a common school education, and at an age when their growth, shape and constitution are more likely to be affected by external circumstances, than at any subsequent period of their life. How easily they may be injured, permanently and seriously, in this respect, cannot have

escaped the observation of any one at all acquainted with their constitution. It is hardly possible to attach too much importance to those circumstances which are connected with these high interests of a whole generation, as the situation, size and general construction of school houses certainly are. With regard to these and other circumstances, however, which will more or less readily suggest themselves to your minds, I feel constrained to observe, as I have more fully *done on another occasion, that,

After having taken some pains to inform myself on this subject by personal inspection of the buildings in several of the states, and having availed myself of the assistance of an intelligent individual, who, at my request, has visited many houses in different parts of the commonwealth, I must say that, with comparatively few happy exceptions, there exist the most obvious and important defects in most of them, a want of regard to the convenience, comfort, and health of the children, and that, so far as buildings and accommodations are concerned, many of the tenants of our jails, and the convicts in the state's prison (excepting those condemned to solitary confinement, and I am not certain that these should be excepted) are better provided for than the tender and lovely children of New England, in the houses built and maintained for their benefit, and that a true and just regard to their health, their general physical and mental powers, their social, delicate and moral feelings, there is, at this moment, a greater call for the effective interference of the wise and benevolent, than there is for the prison discipline society, or many other benevolent exertions of the present day.

As it regards the studies which children should pursue it may be observed, those parts of learning should occupy the first and

* Report on School Houses, published by the Essex County Teachers' Society.

principal attention which are of the most practical importance to those engaged in acquiring it. I am not aware that anything is taught in these schools which is improper, useless, or altogether foreign to the wants of those who attend. Knowledge of almost every kind, on proper subjects, will, on some occasions, be found convenient, and always ornamental and elevating. Yet, considering the time which can be given to study by the generality of children, I apprehend changes might be made of essential advantage to the pupils in most of our schools; and considering that the large portion of those who attend these schools, are not designed for professional life, that the principles of agriculture, mechanism, manufacturing, the constitution, laws and general organization of the general and State government, might profitably take the place of what are called the higher branches of education, and more especially should the examples and illustrations of science be taken from the business of common life. The principles of philosophy and chemistry are exhibited in the kitchen and shop, in every day's business; and by these should we explain, instead of referring to some experiments, however interesting to the learned, but with which the children have no knowledge and will never have concern.

A wise discrimination in the selection of books put into the hands of those who attend our public schools is needed. The question, upon what principles books shall be prepared for these schools has never, to my knowledge, been fully and ably met, nor the comparative merit of those before the public stated with a just and wise discrimination. As evidence of this, I need only refer to a well known fact, that the authors of the numerous school books in each department of knowledge, upon whatever system and however different in principles, have been able to procure about an equal number of testimonials, from individuals in all the professions, and of about the same respectability; while not in a few instances have the same

men, men too justly entitled to the public confidence, afforded their unqualified testimonials in favor of books composed upon very different if not upon directly opposite principles; so that those who must depend on the recommendations of others are left as perfectly without help, as though no testimonials had been given. There is, certainly, need of light on this subject, and the man who shall take it up and discuss it with the attention and discrimination which it deserves, will confer a favor upon the community of the most incalculable advantage. This question I shall not attempt to meet, and yet you will permit me to make a few suggestions in relation to it. In these remarks, it will be remembered, I refer to the books used in primary education.

The first observation I make is, that books for children should be small. Larger books are discouraging, and will be worn out before their contents become adequately known. And though every page may offer something new and inviting, yet much of the pleasure which would otherwise be afforded, will be lost, because these facts are found in a book which they had long had in their hands.

The books themselves should be of good paper with a fair type, the letters and words distinct, but not large. The eyes of children do not require this. In fact, large letters, and especially words in large letters, are painful to that organ, are taken in by the eye less distinctly, and comprehended with more difficulty, while the effects must be injurious; among other evils, bringing on, prematurely, the defects common to old age.

On the same account I must express my doubts whether all the advantages of the *cards*, now extensively introduced into schools (and the advantages are certainly many) are not more than counterbalanced by the injury they do to this tender organ, by the size of the letters, the distance and position at which the children look at them. My own observations must have been singularly inaccurate, if I have not witnessed striking

evidence of injuries sustained by children in consequence of this mode of instruction.

These books should not be filled with the more singular and uncommon circumstances connected with the subjects of which they treat. These are not needed to make the subject interesting to children. It may justly be doubted whether they please as much as those of a more common character. They certainly cannot be so well understood, and being singular, they do not afford so true and perfect illustration of the general condition of the subject, while by directing the attention constantly to these uncommon and extraordinary things, the mind becomes fastidious, so that afterwards nothing but the strange and miraculous can interest. The common, and therefore more beautiful and useful operations of nature will pass unnoticed, and, as a consequence, the Great Jehovah, in his real character, remains unknown, because unseen in the operations of his hands. Many parents and instructers, highly jealous of works of fiction, yet overlooking through ignorance or inattention, the principle by which these prove injurious, direct those under their care into a course hardly less hurtful both to the body and the heart, when they convey them through books filled with little else than the anomalies of nature.

In preparing books for youth, a distinction should be made between facts which children cannot, with common advantages, discover and collect, and those which from facts stated they can infer. Nothing I apprehend should be introduced into a manual designed for schools, which can be inferred from principles with which children may be justly supposed to be acquainted. For illustration, a child may be taught why the extremes of the earth are denominated frigid zones. If he understand this, and surely a child may be made to understand enough about it, to infer that in every part of land and water, in those divisions, cold must prevail, it should not be stated concerning any portion of them, that the land is covered with

snow, or that the water must be covered with almost perpetual ice, and the inhabitants clothed with the warmest furs.

It might be necessary to inform the child, that London is the capital of English government, but having stated the number of its inhabitants, it should not be added that it is the largest city in the kingdom, or in all Europe. Or to vary the manner, he might be told that the state of government of the United States is at Washington, and then left to infer that this is the capital of the nation.

If the book be designed for exercises in spelling, the *primitive* words may be put down, but the *derivatives* of regular formation the pupils should be taught to spell by rule. Or, to vary the exercise, tables may be composed of derivatives and the primitives omitted, which the scholar should learn in the same way

Words for spelling should have as few marks and figures about them as possible. They perplex the mind, injure the eye, and at best do but little good, much less than, in general, is apprehended. They may be useful to instructers. If so, let there be a set of books prepared especially for their benefit. Scholars will receive their pronunciation almost entirely from their teachers.

Such keys as Walker's, in his Dictionary, are still worse. Of all appendages to spelling exercises, I know of none, which I think so pernicious. They afford almost no help. Most of the words in the key are of far more difficult pronunciation than the words they are intended to interpret.

I doubt whether the man can be found, even taking Walker himself, who could without hesitation read a page composed of words spelled after the manner of his key. But the greatest evil is, that this method divides the mind, confounds the recollection at the time, and in subsequent life often leaves a perpetual uncertainty with many in respect to the true spelling. Where books of this description are used, the evil is often manifested in the misspelling of children in their com-

position and other writings. It shows itself in after life in the hasty compositions of those who had been educated under such a system, not to be seen in every individual, but in many, not in all words, but in enough to demonstrate the evils of such a plan.

The same principle should be adopted in respect to the instruments or mechanical helps which are furnished children in preparing for their exercises. A child in the progress of his education should be regarded in a different light from a mechanic, whose interest it is to accomplish the most work in the shortest period, and who should therefore furnish himself with the most perfect instruments, patterns, &c. He should be regarded as one whose powers of mind and body are to be drawn out, strengthened, directed, and perfected. At this time it is not his object to get money, but intellect; not to drive a great trade, but to get skill.

It is not therefore to his purpose, for example, to trace out a letter, or diagram, or map, but to make or draw one. Instruments and patterns therefore should not be furnished, when it is practicable, in the common sense understanding of the term, to do without them.

A set of *bricks*, as they are called, may be good things for little children. They can learn many things with them which they will not without. But for the purpose of exercising and strengthening the mind, the small blocks and pieces of boards which may be collected in every carpenter's or cabinet maker's shop, are better. It requires, on the part of the child, more plan, forethought, arrangement, and accommodation to bring a pile of them to form. And when we reflect upon this, and know how much the happiness of children depends upon employment, it is not to be wondered at, that these last will amuse children for a much longer time than the former. I apprehend that every nursery and school of small children, should be supplied with both.

Holding an intimate connexion with the foregoing observations, is the remark, that a distinction is to be noticed between a mind filled with facts, and an understanding strengthened and improved by exercise. Neither of these should be neglected, but in comparison, the latter is much the more important. Were I to observe that a child ought not to be allowed to treasure up facts without being able to give a reason, it might be thought that I mistook the character of the age. I know well that this is not, professedly, allowed, and yet in actual practice, I apprehend nothing is more common. But suppose a pupil taught to give a reason, does it certainly follow that one great end of education, which is the strengthening of the mind, has been obtained? With the means now afforded the young to obtain a knowledge of the various branches taught in our schools, and the mechanical expedients by which these are explained and illustrated, a very good understanding of them may be acquired, with very little effort, while it is not so much the amount of knowledge obtained, as the labor expended in obtaining it, which contributes to strengthen the mind, or in other words, which constitutes true education. The observation may seem strange, but it is nevertheless true, (taking arithmetic for an example) that those who, without much assistance labor from day to day over a perplexing question, and perhaps finally get but an imperfect knowledge of it, often acquire more mental strength, and depth and reach of thought, than those who, with the help of some appropriate and familiar illustration, think themselves, and are thought by others, perfectly to understand the whole. It was well said, I think, by a distinguished natural philosopher, that he gained more by his unsuccessful than his successful experiments, because the former made him think the more. It is by the amount of thought, more than by a ready comprehension of a subject, that the mind is strengthened, made quick, active and powerful. With the illustrations and explanations put into the hands of

learners in almost every part of education, there is hardly left a point for them to investigate, or a doubt for them to solve. They can as well understand the principle, as learn the fact, without thinking, and in regard to most things, reasoning and committing are, with them, equally matters of rote. I will not undertake to say in this place, that any of the subjects of study are made too plain, or the way through them too lucid. But I do say that no one should think the youth properly trained and capable of vigorous mental exertion, barely because he has learned the facts stated in his books, and can give the reason for all he knows. The former may be a mere effort of the memory, the latter is often not less so. The fact and the reason, impressed on the memory, may be useful, but the great end of education is but poorly answered, if there has not been something like an original and inquiring effort of the mind to get them there. There is certainly a delusion on this point in the public mind. I wish I could set it in a more prominent light. I hope these observations, however, may be instrumental in calling the attention of some more fully to the subject.

I do not undertake to say that the books in use should be laid aside, or the student required to push his way through darkness and difficulties, when the path is made plain and smooth, and perfectly luminous. But of this I feel confident, if the books now in use are continued, other methods must be resorted to, to set the thinking powers of the young to work, or we shall have a generation grown up with memories well stored with knowledge, both of facts and explanations, with very little energy of mind to martial or direct them.

The principles upon which attention to study and order in schools shall be obtained deserve a distinct notice.

Every part of education should be so conducted as to leave the child to understand that the acquisition of knowledge is a business which requires time, industry, effort, patience, per-

severance, sacrifices; that it cannot be bought with money, nor obtained by play. I surely would not make the business of education a melancholy concern, nor by any means gather around it, unnecessarily, one gloomy or forbidden hardship. There are evils enough in the world without studying to increase them. But I will seriously ask whether it be possible for a child, in any recreation, to get a thorough and well balanced knowledge of any science? And if it were possible, whether, considering the circumstances of after life, it would be desirable, when, with the best effort to produce a sober, careful, and persevering attention to business, there still is listlessness, impatience and inattention enough? Look abroad in the world, and you will see that the necessary concerns of life sit heavily enough upon men, without the additional weight, which the system of education referred to is calculated to give them.

A child already half ruined by improper excitement can, perhaps, be induced to study, by the artificial charms which may be drawn around a science, and a child already worn down by long application may then be roused to new exertion. But in the first instance, new injury is done where ruin was coming fast enough and sure enough, while in the other, the mind already sufficiently exercised, and calling for rest, is excited to new effort, just as the man worn out with the labors of the day may be roused by the stimulating glass.

The additional amount of learning thus obtained bears no proportion to the injury sustained in the manner of getting it. I surely would prefer that a child of mine should remain ignorant, rather than have him drawn to study mainly by such morbid excitements. If we look, therefore, to the ultimate effects of such a system, I apprehend we shall find good reasons why it should not be adopted, while on my own part, I feel quite confident the enjoyment of the child for the time, the very object contemplated by this system, is rather dimin-

ished than increased by it. A constant round of amusement (and if study be pursued as an amusement, it falls within the general observation, though it may apparently meet with the wishes of the child), has never been found to secure the greatest amount of enjoyment. No individual, no family, no school, nor any other community, where everything is done for amusement, can be named, whose actual enjoyments are as great, as where the real business of life is conducted as a serious concern. Whatever may be their first inclinations, it is not possible, in actual experiment, for any one of the human race to be actually satisfied, without a worthy object seriously and laboriously pursued.

Beside, youth cannot be well and thoroughly educated upon this system. A few of the beauties of science may be thus acquired, but hard and rugged places will come, where no wayside flowers will bloom. Those who have been allured and enticed along by the accompanying scenery, will here stop and faint, and give over. Other and higher motives must come in, or disappointment ensue. I would certainly no more remove out of the way any incidental circumstance, than I would any of the beauties of nature, which often cheer the path of the way-worn traveller. I would rather study to multiply them. Yet I would be as far from making these the leading motive or chief inducement to study, as I would from holding out the dandelions and violets which present themselves by the wayside, as a motive for one who has the interests of his country in a foreign court committed to him, why he should go from this to a distant land.

The principles too, upon which attention to books and good conduct are secured are of vital importance. Who has not witnessed a most striking contrast in the conduct of many a young person, when in and out of school, between their attention to the laws and regulations of school, and other requirements and restraints, equally important and of equal moral

obligation. In regard to books, how solicitious some will be to make themselves fully acquainted with the several branches of study, so far as recitation is concerned, who exhibit no inclination to learn, further than this service renders necessary. How many, who, having manifested an apparent delight in the acquisition of knowledge, during the common course of education, give up all attention to books, almost as soon as they leave the school. To what principle in nature or circumstance in education can this result be attributed? No doubt, different causes, operating with different force, and varying in respect to the individuals affected by them, might with propriety be assigned. That, however, which, in my apprehension, operates with the most power and to the greatest extent is, the motives by which subjection to the laws of school and attention to books are secured. In too many schools, an artificial excitement is created, rewards and penalties of a specific nature and of temporary duration are made to bear upon the mind, and the scholar is held in subjection to the laws, and in attention to his books, by considerations which entirely cease to operate, when the period of school is over. And when these cease to operate, the habits formed under them will of course change. As a consequence, the youth who was a most docile and orderly member of school, proves a very untractable and disorderly member of society, while the books over which he has pored with such intense application, are suddenly and lastingly laid aside. It is here, as with many on board an armed ship, or soldiers in the regular service; none so obedient, so punctiliously exact in the routine of regular duty, when under the inspection of the officers, often none so turbulent and ungovernable in every other condition of life. The reasons in both cases are substantially the same. Hopes and fears of an artificial, temporary and restricted nature are called up, while the abiding and permanent principles of our nature are neglected. The

facility with which order and industry for the time, and for the specific object in view, may be secured, has gone very far to encourage a resort to this artificial method. For with how much greater ease can a man, by these temporary considerations, secure order and attention among his pupils, than by his exertions to enlighten the understanding and convince the heart, thus holding his pupils in subjection by moral and permanent considerations. Let a parent enter a nursery of noisy, contentious and idle children, or an instructer a school of boisterous and turbulent youth, with a rod in his hand, or his pockets filled with such toys as children delight in, and in a moment, all will be still as the grave and hushed as death. And then he may compliment himself on his skill and success in government, while, so far as regards the training the young to habits of subjection, order, and industry, and preparing them for future good conduct, when these considerations cease to operate, in the great proportion of instances, he has done nothing. He has stayed, but not eradicated the restless workings of the heart; he has smothered, but not subdued evil dispositions. On the first opportunity, when it can be done with impunity, they break out again with increased violence.

It may be urged in opposition to the sentiments here advanced, that large numbers brought up under these artificial restraints and excitements do well in after life. I am very sensible of it, and rejoice that it is so. But notwithstanding, I must be allowed to abide in the opinion expressed, and to think that these favorable results are not the effect of the system referred to, but are produced by other happier and counteracting principles. Among the great variety of influences, which are constantly operating upon men, it is not often that the legitimate good or evil effect of any one of them is distinctly and prominently developed. In this country we are extremely happy, for we live in a community, where there

are, in the general principles, manners and institutions, so much of the elevating and recovering, that the evils which would naturally result from the iniquitous practices of the wicked, or the mistaken theories of the good, are never fully experienced. And to causes of this nature I must suppose it owing, that so many placed under the influence of a government of temporary restraints, escape in part the evils which would otherwise certainly spring from it; but that all do not entirely escape we have melancholy evidence in the fact, that, after our youth have arrived to mature age, that the *prayer* and *lecture bill* is the only effectual motive which can secure the *devout* and *regular* attention of the students upon the several services of the higher seminaries, and even of the *Theological Institutions*.

These schools should be made instrumental in all their operations, instrumental of inculcating correct moral principles and feelings; yet I apprehend, that to a very considerable extent, very unintentionally indeed, they fail in this. For reasons, which I must pass without noticing (many of them, however, will present themselves to your minds) in every civil code, there is a great disparity between the actual demerits of crimes and the penalties which the law inflicts upon those who commit them. The same crimes are also estimated very differently, at different times and by different governments. This circumstance operates very powerfully and extensively, not simply upon the less reflecting, but upon society in general, producing an erroneous estimate of the comparative guilt and aggravation of transgression. It sets up a standard of moral judgment and feeling, extremely different from that in which all actions will finally be weighed. Paley observes, and I think correctly, 'that many persons feel satisfied with themselves, if they do or omit nothing, for the doing or omitting of which the law cannot punish them.' This is an evil, I apprehend, inseparable from civil and statute laws, which, though

it might in some degree be remedied, yet, can never be entirely done away. Human laws must regard the more visible and immediate evil consequence of actions, leaving the more secret and ultimate consequences, which in most cases are the most aggravated, to conscience and to God. Hence, upon the principle already suggested, erroneous moral feeling and judgment will spread themselves in society. The remedy for this evil must be sought, where alone it can be found, in a more deep and wide inculcation of the pure and discriminating doctrines of our holy religion. As this result must always attend all instituted laws of human enactment, it should teach men not unnecessarily to multiply them. For in each of these laws, a standard of moral judgment is set up, differing at least in some degree, from the unvarying rule established by the wise author of our nature. I feel very strongly impressed with a conviction that the evils which have resulted to community, in consequence of a perversion of moral sentiment and feeling, occasioned by particular laws, have sometimes been greater than those which would have accrued, had the crimes, which those laws were intended to prevent, been suffered to pass unnoticed and unrestrained. I think it might satisfactorily be shown, many laws have rather increased than discountenanced crime. These observations, if just, suggest a consideration of practical importance, in respect to the mode of government which should be adopted in schools, and indeed in families, which is, that there should be as few positive enactments, or rules and regulations, as may consist with the regulation of the school, in outward conduct.

When laws abound, a school may be governed, but it is next to impossible that the moral sentiment should not be hurt by them. For in each of these laws, a standard is set up, of different graduation from the law of God, which will therefore lead away the mind and heart from the great and abiding principles of moral truth and worthy action. Could all the erro-

neous opinions and corrupt sentiments to which laws have given rise, with all their dreadful consequences, be presented to view, so many and so great would they appear, that at first thought, many would come to the conclusion, which I once heard expressed, that our legislature might be a good thing enought, and we could well afford to support it, if when together, they would enact no law, but that the expense of the body and the burden of the laws together were beyond our ability to bear.

There are few services promising more practical good to the world at large, which one qualified for the service could perform, than to bring together the different estimates which nations and other communities of men have put upon crime, and then trace out, in the history of these nations and communities, the moral results which have followed.

And it would open a means of a most enlightened and healthful moral improvement in the moral education of youth, should the same thing be done in respect to the infinite variety of positive enactments imposed upon the members of our institutions of learning; institutions which, with all their difference, are yet in true value beyond all price. However popular and even imposing these *strict* and *ceremonial* laws may be, and however high they may have raised institutions in the public favor, and however good may have been the success, which, notwithstanding these hindrances, has followed the instruction given in them, yet I feel sure they would all pass away before a candid and extensive development of their nature and tendency, and that those who have held them in favor would be among the first to sacrifice artificial theories at the altar of *all-powerful truth*.

LECTURE IV.

ON

EMULATION IN SCHOOLS.

BY

LEONARD WITHINGTON.

EMULATION IN SCHOOLS.

Question. May men have no other chief end than the glorifying and enjoying of God ?

Answer. Men ought to have no other *chief* end than the glorifying of God; but they may have SUBORDINATE ends.

Vincent's Catechism.

WHETHER it be from foreknowledge of the character of this assembly, or from distrust of my own conclusions, a presentiment is creeping into my mind, that what I am about to say will not meet the total approbation of the respectable persons, before whom I am called to speak. This may be my infelicity ; but an infelicity overruled by some superior considerations. Much as I should wish to prop my own opinions by the suffrages of minds, enlightened by theory and matured by experience, I cannot consent to wave an inward conviction from respect to any human authority whatever. Opposition of opinion, on doubtful subjects, implies no personal disrespect ; and it is by the conflict of mind with mind and argument with argument, that truth becomes, though not absolutely discovered, yet better known. I come to throw my views before you for your examination. Weigh them, and let them pass for what they are worth. I supplicate no man's mercy ; I wish to forestall no man's opinion. It is proper, at least, whether I am on the victorious or losing side, that all sides should be heard. It may contribute something even to the stability of

truth, for some of you to detect the fallacies by which she is opposed. It may be one of the meanest of her victories, to triumph over reasoning as weak as mine.

I am not, however, conscious of embracing wrong sentiments. In the following remarks I shall speak from my own *present* convictions. If I should use a dogmatic style, it is because it is inconvenient to stop every moment and explicitly state every secret limitation which the mind may make. I am aware the ground on which I stand is debatable; and from it I am willing to retire, when reason and conviction shall sound a retreat.

Let me protest also against one misconception to which my dissenting hearers will be liable. My discourse will be wholly employed among comparative ideas. I am to warn you against, what I deem, moral extremes; to show you that the human heart is a mixture; and that mixed motives best suit its capacities, and call forth the fulness of its powers. Now do not impute to me more than I say; do not suppose I say absolutely what I say with restriction; do not make me responsible for consequences which, from my premises, are not fairly drawn; do not imagine, because I am seeking the middle channel, that you see me stranded on the farther shore.

It is not always easy to write on a prescribed subject; for it is very possible that you may not answer the question as it lies in the minds of those who ask it. You have proposed to me the question, — Ought emulation to be encouraged, as a motive to exertion, in schools? I understand there has already been some debate in this assembly on this point; and I have hastily run over some articles in the Annals of Education on the subject. Whether I shall meet the difficulties, is perhaps doubtful; and it is more doubtful still, whether I shall, in any mind, satisfactorily answer them. I come to hold up a very feeble torch; and not to kindle a sun, which is the prerogative of Him who said, *Let there be light, and there was light.*

Whether emulation ought to be encouraged in schools, depends on the answer to the question, whether emulation is a good principle. What is emulation? Our discourse must take its origin from a verbal discussion.

Mr Locke, whose examination of principles showed him the necessity of nicely considering words, has told us, that language has a *two* fold usage; *civil* and *philosophical;* by the civil usage, he says, he means such a communication of thoughts and ideas by words, as may serve for upholding common conversation and commerce, about the ordinary affairs and conveniences of life; and by the *philosophical* use of words, he means such a use of them, as may serve to convey the precise notion of things, and to express in general propositions certain and undoubted truths, which the mind may rest upon and be satisfied with, in its search after true knowledge. These two uses, he says, are very distinct; and a great deal less exactness will serve in the one case than the other. Similar expressions we may find in almost all the metaphysical writers. They all sing a melancholy monody on the ambiguity of popular language; and plead the necessity of a new Lexicon, compiled with far greater precision and suited to the purposes of metaphysicians alone.

I confess for one, that I doubt the correctness of these representations. I suspect, — and it is certainly lawful to propose a suspicion even against high authority — that language, after all, is a practical analysis of the powers of the mind, and the properties of things, made according to the wants and observations of men; and that these broad views, formed in the exigencies of real life, are more permanent and more useful, and have more relative truth in them, than the fine spun distinctions devised in the closet of the philosopher; and never to be understood until our thoughts are wrought into an artificial state. Men in common life never give names but where they can see distinctions; and when the names of these distinc-

tions are found in all languages, and have floated down through all ages; we know they are founded on the common observation of mankind, they have the suffrage of the whole world in their favor. Besides, we give names for speculative and for practical purposes; and speculative names are often lost as soon as the speculator moves out of his abstract circle. The *a b c*, the *x y z* of the Algebraist are of no use but for algebraical calculations. But it is remarkable that the common use of language is always given for practical purposes. It is the sign and the representation of that *outside* view of things, which men in active life always take. Let me illustrate my meaning by an example. In popular language, and in the broad views of the human mind, which men in all the stages of society have entertained, they have held such a conception and wanted such a word as *memory*; it is, I suppose, translatable into all languages; and if uttered to the savage would be immediately understood. A late metaphysical writer,* however, thinks that, for the analysis he has in view, it would be better to sink the word in a more comprehensive but accurate term — *suggestion*. For what is memory, says he, but the suggestion of an event, with the consciousness of its being past? Well, no doubt to throw away memory and to take suggestion simplified his system, and increased the beauty of his arrangement. But if you were to go into Boston market, and leave your memory behind you, and take nothing with you but suggestion, how long would you make yourself understood? The truth is, all arrangement of things, all classification, and of course all language, has a reference to the practical perceptions of men. These they have always followed; and hence, I suspect that language, popular language, is a safe light to guide us in finding the extent of their conceptions, and the principles of their knowledge. The civil use of language is

* Dr Brown.

always substantial and permanent; the philosophical (in Locke's sense of that word) is often shadowy; and like other shadows, passes away.

In tracing the history of all metaphysical reasoning, it is curious to see, how much of its acuteness and ingenuity consists in innovations on language, and departures from the common usages of mankind. We are told by one that all virtue depends on expediency. But what is expediency? Surely not what that word expresses in the light conversation of common parlance; as well might the eagle attempt to support his flight to the sun, by the waving of a single feather, as for a moralist to build a solemn system of duty on such a sandy foundation: but expediency here is something, which can justify the assertion that it is the ground of all virtue. Then you have a wonderful discovery, a reciprocal definition, that all virtue is founded on expediency; and expediency is that which supports all virtue. When two abstract words are thus brought together; the one to define the other, with an attempted accuracy beyond the plainness of common speech; I am sure beforehand, that I am to have all the puzzle of philosophy without the lightof truth. One column of smoke goes up to illuminate another column of smoke; and both these columns serve only to fill the air with darkness; and increase the number of sore eyes. Bishop Butler speaks of those, who trace all our actions up to selfishness — even the saint and the angel act from selfish principles, for they find delight in serving God, and doing good to man; as much delight as the Epicure in his sensual pleasures; and that delight is as much their own delight, and therefore it is selfish. In this sense, no doubt, every action in every holy being is selfish. But then, as Butler remarks, *this is not the language of mankind.* I have often thought, how many a fine system might be overthrown by the remark — THIS IS NOT THE LANGUAGE OF MANKIND. Seneca tells us that all anger is sinful. We must not merely rule it; but we

must kill and purge from our hearts every seed and sediment of that baneful passion. Aristotle had said that anger was necessary; it was one of the constituent principles of our moral composition; but we must govern it by reason; we must use it as a private soldier, and not as a general to lead the way. But no, says Seneca; if anger listens to reason it ceases to be anger; it is to be called by another name; for what I understand by anger is a principle unbridled and ungoverned. Very well,—here we have a definition which makes anger a wrong thing; and then the sapient conclusion, that all anger is wrong.* Now what shall you oppose to Seneca's reasoning? Why, simply the remark of Butler—*this is not the language of mankind.* St Paul came much nearer to that language when he said, *be ye angry and sin not.* Of all the writers, who have apparently led us through new mazes of thought and landed us on the shore of unknown conclusions, I remember none, who holds a more sparkling preëminence at the present day, than Coleridge. His language is beautiful and precise; his figures are the finest devices stamped on the most shining metal; his thoughts are sometimes new, and his reasoning is sometimes just. His books have paragraphs in them finer and more eloquent than the English language can elsewhere show. Yet his *Friend* is the most misleading book that was ever written; he is the last guide that I should select to lead me to the temple of truth. And what is the difficulty? He is a mystic with more truth and more power in him, than most other mystics; and when he has led you up the mount, in a path of sunshine, as far as he perhaps, or any other mortal can go;—then to fill you with greater astonishment, he plunges into the fogs which surround the top of his Ida or Olympus; and you loose him somewhere between earth and Heaven. The reader is inclined to say at the close of some

* De Irâ, Lib. 1. Sect. 9.

paragraph, splendid and dark — this is very eloquent and touching, and perhaps there is some truth in it, but *this is not the language of mankind.* — In short, you may define a metaphysician generally as a man, who makes a language of his own. When you see a startling paradox, you may be sure there has been tampering with the king's English; and metaphysics can prove anything (as some say) because she is a sovereign mistress of language; and moulds its words to her own imperial will.

There is a kind of unconscious wisdom, which, when men act from the impulse of the occasion, and without any elaborate theories, almost always leads them to a right course. Hence it has been remarked, that there is a wisdom in the common law which deliberative assemblies have emulated in vain; — and hence I infer that the popular use of language is often the best analysis of the composition of the passions and the operations of the mind. The instincts of man are the wisdom of God.

It becomes then, in my view, a matter of great importance, in seeking whether emulation be a good or an evil principle, to ask what is the usage of that word? For language in its civil use is often but the soundings of the voice of nature. Now in all the languages with which I am acquainted, there is a word answering to our word emulation — which is supposed to express an ambiguous passion of the mind; and that passion is good or evil as it is prompted by right or wrong motives and is directed to salutary or pernicious objects. In Hebrew the verb is, קנא and the corresponding noun קנאה a word so holy as sometimes to be attributed to God himself; and sometimes so bad as to express one of the most hateful emotions of the human breast, Gen. xxxvii, 2, *His brethren envied him.* But Elijah says I have been very *jealous*, (which will bear to be translated very *emulous*) for the Lord God of Hosts, because the children of Israel &c, 1 Kings xix,

14, the word Ζῆλος, in Greek is of the same character. It answers very nearly to our word emulation. It is a medium word says Oecumenius, an old commentator of the middle ages, which may be used in a good or bad sense. It is a good emulation, says Chrysostom, one of the most pious and eloquent of the Greek fathers, when any one is emulous to imitate virtue. Εστι ζῆλος ἀγαθὸς, ὅταν τις οὑτω ζηλοῖ, ὡς μιμησασθαὶ τὴν ἀρετὴν. See *Sincerus de hoc verbo.* Theophylactus says the same. The Apostle Paul uses this word in this double sense. It is good to be always zealously affected in a good thing. Cicero remarks concerning the Latin word *Æmulatio* that is used in two senses, good and bad. As to our English word, it is defined by Dr Johnson to be *desire of superiority*; which may be a superiority in goodness as well as sin. In the examples which he quotes, we have not only the use but the definition of the word. 'Aristotle,' says Dr Sprat, 'allows that some emulation may be good and may be found in some good men; yet envy he utterly condemns, as wicked in itself and only to be found in wicked minds.' 'The Apostle,' says Dr South, 'exhorts the Corinthians to a holy and general emulation of the charity of the Macedonians, in contributing freely to the poor saints in Jerusulem.' The pious Cowper also uses the word in a good sense; whom I more willingly quote, as the sentence bears directly on the point in debate. In his Task, speaking of the decay of discipline in public schools, he says,

> Then study languished, EMULATION slept,
> And virtue fled.

Here we have not only the use of the word in a good sense; but the direct testimony of Cowper, that he considered it as a great evil to have all emulation extinguished in our public seminaries. He couples it with the decay of study and the flight of virtue. The translators of our Bible have used the word

twice, once in a good sense, and once in a bad one,— Rom. xi, 14, and Galatians, v, 20. In the first instance it is in a good sense. 'If by any means I may provoke to *emulation* them which are my flesh and might save some of them.' In the second instance it is used in a bad sense. In enumerating the works of the flesh; he enumerates idolatry, witchcraft, hatred, variance, *emulations*, &c. These instances may prove that it is the general suffrage of mankind, (for their language is a transcript of their thoughts) that they believe they have found a good principle in the human breast which may be expressed by the term emulation; and that it bears so much resemblance to a bad principle that it may be expressed by a common word. Now if a man is of a mind so to define emulation as that the very existence of the principle must be wrong, no doubt he can do it; but then we reply to him in the words of Butler — *this is not the language of mankind.*

Let us next inquire what the good part of this principle is, which mankind have consented to express by so suspicious a word.

We find when we nicely survey the works of God that one part of creation is made to correspond to another; one thing is set over against another, as an apochryphal writer expresses it; objects are adapted to our eyes, and our eyes to objects; motives are made to move our minds, and our minds are made to be moved by motives. We find from what we can learn of the vast circle of existence that nothing is alike; — no two flowers are of equal fragrance; no two stars are of equal brightness; there are ranks and degrees in Heaven — Archangels, angels, thrones, dominions, principalities and powers; even the glorified saints, sunk as they were in a common guilt, and redeemed as they are by a common blood, are not probably exalted to equal glory. In the parable of the talents we find that those, who had made the best improvement, were raised to the highest reward. On this earth we

know there cannot be equality. Whether we rate men by their abilities or their estates, it is impossible to keep them equal for a single day. You might as well attempt to make all birds fly in the same altitude of air, or all fishes swim in the same fathoms of water. If you were to prostrate every throne, and break every gubernatorial chair, and turn out every member from his seat in Congress, others would arise up to take their places; if you were to scatter all property, by the strictest agrarian law, the equality could not last, some would be rich, and others poor. In a word, if from the universal order of nature, in this planet and probably in all planets, we can collect the will of God, as it is manifested by all testimony of all times, — it is his holy will, that his creatures, in higher and lower circles, should stand around his throne; occupying all the gradations of being from the highest archangel, of whose existence we trace no commencement; to the sightless insect, who flourishes only for an hour.*

Nor are these orders fixed. It is intended that all intellectual beings should rise; certainly it is so with man; or why do we mount from infancy to boyhood; from boyhood to the state of man; from private life to public; and finally, if holy, from this dying world to an immortal state. This vast universe seems made for progression. That ladder which the sleeping patriarch saw in his dream, is placed before every man, without a vision; its foot is supported by the earth, and its summit leans on the skies.

Such is the outer world. If we look within we shall find a propensity, an impulse, which exactly corresponds to this external order of things. We all desire to rise. It rouses our

* I hope no reader will suspect me of adopting Paley's dangerous notion, that Heaven and Hell differ only *by degrees;* that hell is only the base of the staircase of which heaven is the top; I speak only of the virtuous part of creation; in which, when the wicked are separated, there will doubtless always remain orders and ranks.

activity, and conquers our indolence, to look forward to some future state of greater influence, and greater power, when we shall receive that submission of opinion which we are now paying to others; and hand down the wisdom to future ages which we have received from those who have gone before us. This principle is born with us, and breathes in us; and it is in vain, to try to suppress it; it is too much a law of nature. In short, it seems that a man's reputation for learning or invention, or ability of any kind is an estate to which he has just as much a right as the acres which he purchases with his money. To be sure, he must not covet more than he can justly claim. He must not set up for a factitious reputation. He must not claim to speak as well as Cicero, when he hardly equals Hortensius. But there is a place to which he is entitled, and there let him contentedly stand. The property of the mind, the estates of genius, are not the less real, because they cannot be fixed by deeds, nor measured by the surveyor's chain.

If the man has a right to this, why not the boy? Children have all the feelings of men, and a school is but an epitome of the world. If a boy comes into a school, with twice the abilities of any other, and twice the industry, — why, he has a right to all the fruits of these powers. He has a right to take the standing, which his Maker has given him. It is his estate, to which he can make out the best of all titles, — the gift of God. If he can spell better than any one in the class, he has a right to the head of the class. If he is a better mathematician, or a better linguist, he is entitled so to rank in the estimation of all who would judge according to the truth. In a word, there ought to be justice in schools; and justice implies property; but in schools the only property is the tenements of the mind. Perhaps it is the best moral discipline, to which a school can be subjected, to find the master dealing out reputation according to merit, and teaching his scholars to do the same.

Here then, we have two indications of the will of God; the external and internal world. Without, we find the whole universe ranked in orders and degrees, that a boundless field might be opened to enterprise, and that each individual might be incited to effort. Within, we find the irrepressible desire; a desire dangerous, I know, and to be controlled by higher principles; but still a desire which no attainments in religion will ever extinguish — to rise — to put forth all our powers; and to reach the highest station our abilities may be fitted for. Now it seems to me, that these two arrangements meet each other; and conspire to promote the harmony of the world; for as the old poets tell us in the ancient chaos; that when the particles separated; the fiery element flew up and formed the stars; the etherial air went next; the grosser sunk still nearer to the earth, and *downward purged the black tartareous dregs* — and every element found its place;

> Ignea convexi vis sine pondere cœli
> Emicuit, summaque locum sibi legit in arce.
> Proximus est aer illi levitate, locoque:
> Densior his tellus.
>
> *Ovid Met. L.* 1. *line* 26.

So it seems to me, in the moral world, that *that* degree of emulation in good things, which leads the man or boy to put forth all his strength, controlled by that principle which forbids him to ask any more reputation than is assigned by justice, that, that preserves the balance of the system. That is the law of nature; that is the wisdom of God.

I am not ignorant that here it may be objected that emulation is a dangerous passion, the parent of ambition; the mother of crimes which have filled life with contests and deluged the world in blood. I shall be told perhaps of the morbid sensibility which it awakened in the heart of Saul, whose peace of mind was forever destroyed when the daughters of Israel sung — *Saul hath slain his thousands and David his ten thousands*; — of Haman, whose honors were nothing to

him, and whose banquets were tasteless so long as he saw a poor captive Jew *sitting at the king's gate.* I shall be pointed perhaps to Roman story ; and told of Marius driven almost to distraction by the impress of a seal, in which was represented Jugurtha delivered up to his rival, Sylla. I shall be called to look at all the heart-burnings and supplantings of political life ; the party spirit, which has shaken nations ; exalted the worthless ; and tumbled the most deserving from the summit of their power. I shall be called to review the jealousies which have entered the gardens of philosophy, and disturbed the men of genius amidst their laurels and their repose. I shall, finally, be called to review the principles of the gospel, which trace every sin to its earliest germination in the heart ; which enjoins pure actions from pure motives ; and commands us to lose every selfish regard for personal ambition, in a generous desire to advance the glory of him, who made us. The gospel enjoins purity of heart and deep humility ; and how are these consistent with a spirit of emulation, cultivated even in our common schools ?

These are timely suggestions, and, if they cannot be answered, I confess I must abandon my ground. But is it not plain, that as some minerals are fatal poisons when given in great quantities and alone, yet become salutary medicines when mixed in a compound and in proper proportions, so of some of the instincts of our nature, they are dangerous when left alone, uncontrolled by higher principles, yet they form the very beauty and perfection of the human character when blended with the principles of our holy religion ? For example, industry — what a dangerous thing it is, left to run without direction, and toil to fill up the cravings of an unsanctified heart ! What was Cataline's industry ? What was the industry of Benedict Arnold ? It was an industry prompted by their selfishness ; and which exhausted their powers only in the works of treachery and blood. But how would you cure

these men? Would you rob them of their activity and put them asleep? No, you would turn their industry into a better channel. Now emulation bears some resemblance to industry, of which it is often the most powerful spring. We may be emulous for good things; and we may be emulous, and yet satisfied with that portion of reputation, which truth and justice assign to us. I may put forth all my powers; I may resolve to do my best; and yet be satisfied, when after a fair trial another has gone beyond me; that is, I may value the possessions of the mind, and yet covet no more than my lawful possessions. Emulation is a very harmless principle, only let justice come in to control it; and is not this possible? Does the introduction of property necessarily imply the introduction of theft and extortion? No; the command, *thou shalt not steal*, necessarily supposes the existence of private property, and the command not to envy others, necessarily supposes a share of reputation, which justly belongs to each one of our species. Now it seems to me, you will not promote moral discipline, by denying the existence of this ideal but not imaginary property, (that were a vain attempt) but you must allow the existence of it; and teach each one to be willing to receive his own proportion in due season. In curing vice, we must not war with nature.

Nor can I think a regulated emulation so inconsistent with the principles of the gospel, as some seem to suppose. The gospel sets before us a new career of duty; and incites to action by the noblest of all motives, love to man and love to God. These, no doubt, should be the predominant principles in the Christian's heart. But do these motives exclude all regard to the original impulses of our nature? When it is said; if any man be in Christ he is a *new creature; old things are passed away*, I would ask, with humble submission, what are these old things? It refers — does it not? — to the old sinful principles of our nature, and not to such as are

natural and indifferent. Religion does not alter the constitution of a man's mind; nor the essential elements of human nature. I cannot but think that a part of humility itself consists in having a sensibility to reputation, (and what is reputation but our relative standing in life), and yet a willingness to be surpassed by our superiors in whatever pursuit is worthy of approbation. As patience implies the existence of pain and a sense of suffering; so humility implies the existence of praise, and a sense of its value. St Paul was a penitent sinner, humbled in the dust before God; and yet he has not scrupled to say that he was not a whit behind the very chiefest of the apostles; and he has taught us, according to the common reading, *to covet earnestly the best gifts*.*

As to what is said respecting the morbid sensibility which this passion produces; the ravages which it made on the mind of a Saul or a Marius, I must be permitted to remark, that these evils result not from emulation alone. It was not the emulation of man, but of Marius that made that insolent warrior frantic when he saw the signature of his rival. It was an emulation grown into ambition, swollen with vanity; woven into a cruel and unprincipled heart; an emulation not for good things but a passion nursed in blood; it was a race between two rivals, to see which should outstrip each other in wasting their country and in inflicting miseries on mankind. I take it, all our passions receive a tincture from the particular mind in which they spring up, and from the principles with

* After all, this question must be settled, if possible, from the Bible. Now though our Lord has said (Luke xxii. 25) *that the kings of the Gentiles exercise lordships over them and they that exercise authority upon them are called benefactors; but ye shall not be so;* see also Matthew, xxiii, 8, 9, 10, 11, 12, the question still remains whether this prohibits a desire for a just reputation and a just desire for influence when we compare ourselves with others. Certainly he did not mean to prostrate all civil authority among Christians when he speaks of lordships; and, in the college of Apostles, we must remember that, according to his own appointment, Peter was first, πρῶτος.

which they are combined. It is sometimes dangerous to argue from the individual to the species. It is fallacious to argue from a passion governed by principle to the operation of that passion, uncombined with principle and in its ungoverned state. It was not the fault of Saul or Marius that they had the sentiments of emulation in their breasts; but that they were totally destitute of higher principles, which should control them. Because a wild horse may run away with you, if you mount him without a bridle; it does not follow, that he may not be ridden with perfect safety when tamed by discipline; and governed by the rein.

But perhaps you will ask, considering the inflammable character of the human heart; is it possible to address this principle, in any degree, without leading it to arise to excess? If you encourage it in your schools, will you not inevitably bring forward young Mariuses and young Cæsars, in whose breasts this principle shall absorb all others? Here are two boys, of nearly equal industry and talent. If you set them to comparing themselves with each other, and acting on that principle, will it not be inevitably bad? This is the very pinch of the question. If the use of the principle, like the use of alcohol, is necessarily connected with the abuse, why then every christian moralist will conclude, whatever intellectual advantages it may be connected with, it should be abandoned by all those who set virtue higher than knowledge.

But I apprehend, that when a rule can be laid down, which a boy of an honest conscience may always apply, a rule which separates the lawful from the unlawful; the moderate from the excessive; in such cases there is no necessity of connecting the use of a principle with the abuse. He knows when he reaches the line of justice; and he knows he ought not to pass over it. Let us suppose for example, that the rooms of the treasurer's office in this house were full of gold; and the legislature have passed a law that every one

in this assembly shall take a portion of it exactly equal to the weight of his body. The proclamation is made; and here are the scales, moving with the truest beam and adjusted with the nicest care. Certainly there need be no difficulty in distributing this gold; it will not necessarily be connected with scrambling, or with heart-burning, or bitterness, or recriminations. We have only to step into the balances, and take the gold answering to our weight, and depart, poorer probably than some, and richer than others. Now I must contend, that in a public school, and also in public life, there are these perfect balances to weigh out the precious metal of reputation according to each individual's mental gravity. Every scholar, every man finds his level; fashion and party spirit, envy and personal dislike, may conceal a man's name for a time; as the clouds for a season may obscure the brightest stars in the nocturnal sky; but as the *fair weather* winds are sure at length to arise, and brush away the clouds, and the hidden star shines out in all its original lustre and native beauty, so a clouded reputation is sure to be seen and admired at last. Take some single quality, to be sure, and you may sometimes wonder at the disproportion between a man's merit and his fame; but when you look at the whole compound of his character, it is surprising to see how much justice there is in the public sentiment. In a public school, it is still more clear that every scholar finds his true point of elevation. For, if the master should be envious, or distrustful, or partial, the scholars will be sure to reverse his decrees. They recite together daily, they know each other's application and powers, and their opinions, founded on the most intimate knowledge, are generally correct. The truth is, they *must* judge of each other's standing; it would be impossible to prevent it. Now which is best, to attempt to suppress what it is impossible to suppress, or to allow at once nature to have her course, and to

endeavor to regulate her impulses according to the rules of justice?

But perhaps you will ask another question. Suppose it should be granted that much of this principle will exist and it is impossible to suppress it; should not all the influence of moral action lean the other way. Nature will certainly supply enough of it, you need not encourage it by excitements, holding a positive place in your systems of education. It may be important that your boys should play and laugh; should jump and exercise; should *urge the rolling circle's speed and chase the flying ball;* but we never saw these articles insisted on as duties in the regulation of any school. There are many cases in which all the powers of moral discipline should lean against the impulses of nature; though the existence of these impulses, in every degree, may not be absolutely wrong.

In reply, I would remark, that the chief error on the subject of emulation has been applying it to those minds for which it is least needed. It is of the nature of a stimulant to be given, not to those who have already a feverish excitement to the love of station and of praise; but those doubtful and discouraged natures, who view the summits of learning, and despair to scale them. In this view it seems to me it is needed, and it ought to have a place in our systems of discipline. In some instances it is the only principle which can wake up the mind or infuse confidence. We are often incited to do ourselves by viewing what others have done. We compare our weakness with their weakness; our difficulties with their difficulties; and learn to hope for ourselves by observing what they have conquered. How naturally does a jaded horse quicken his pace when a chaise passes him. It is a law of universal nature and was not given in vain. I have no hesitation in saying that there are some people who have not emulation enough. There are some hearts in which this quickening fire needs to be lighted up. What is the man, and what is the

boy that is lost to all sense of character, and is alike insensible to approbation or shame? There are too some gloomy, discouraged minds, who need only to compare their powers with those of others, and they will be excited to exertion by believing in the possibility of success. I should be very sorry, I should esteem it hazardous, with all the varieties of human nature before me, with all its weakness and all its diseases, to be precluded from the use of this medicine of peculiar minds; in some cases perhaps the only resort.

Then too consider the indolence of our nature. Consider with what difficulty boys are brought to make exertions necessary to success in learning; how little capable they are of appreciating distant good, or of feeling the refined motives which may be suited only to saintly minds. You must take human nature as it is; and though you are not to encourage its corruptions, you must move it, if you move it at all, according to its original laws.

If you were to expel all emulation from a school; and attempt to reduce to one dead level every mind; I question whether you would not make it so different from the world in which your pupils must act, that it would hardly be a place of salutary discipline; and perhaps the best thing about your plan would be, that such is the force of nature, it would be impossible for you perfectly to succeed. The imperfections of your scheme would be its only redeeming qualities.

But while I would warn you from one extreme, I would also caution you on the other side. While I would not extinguish emulation, nothing can be more dangerous than to appeal to that principle alone. Perhaps the grand error of the present day is, paying the christian religion the decent compliment of acknowledging its excellencies, and then acting, in detail, as if it were not true. But the claims of that religion are as wide as the actions of men; it is a rule for practice. There is great emphasis in that passage of Scripture which

commands us to *walk* by faith. The precepts of religion are the results of its doctrines, and both of them should influence every part of life. If any thing I have said goes to exclude the strictest principles of the Gospel from our systems of education, I abandon my ground; for I agree with Augustine, *constat inter omnes veraciter pios, neminem sine vera pietate; id est, veri Dei vero cultu veram posse habere virtutem, nec eam veram esse, quando gloriæ servit humanæ* — Civitate Dei Lib. v, cxix.

It is the fault of our great cities that everything in education is conducted on a system of flattery. The young master is sent to the public exhibition to be admired; and the young miss is presented before the company to be admired. Our praises are demanded, and almost plundered from us when she presents us the composition which is not English; the painting which resembles nothing; and the music, of which the discords are the most pleasing parts. Emulation is taught even in frivolous attainments; and ambition is addressed as if it were a virtue. In the mean time, a religion, which knows nothing of humility, presides over the whole. The dangerous pride of the human heart is kept out of sight; kept out of sight did I say? nay; it is made the chief stock on which the social virtues are grafted; and by the nurture of its evil sap, they are expected to bloom and bear fruit.

The conclusion then to which we come is — that it is not a question whether emulation is to be admitted into schools, for it will exist there whether we will or no. *Non scripta; sed nata lex; quam non didicimus, accepimus, legimus, verum ex natura ipsa arripuimus, hausimus, expressimus; ad quam non docti; sed facti; non instituti; sed imbuti sumus;* — that since nature has admitted its existence we are to allow it; but always to apply it where most needed and to endeavor to combine it with higher principles. Finally, to direct it only to worthy objects, and teach it to submit to the regulations of a

sagacious justice. In a public school, every boy has a share of reputation, which can be measured out to him with almost mathematic certainty; let him take it and therewith be content. Within these bounds emulation may fire the genius, *(Æmulatio alit ingenia)* without inflaming the passions or corrupting the heart.

If, however, experience must overthrow this theory*; if the existence of the thing is necessarily connected with the abuse; if, in the intellectual house, you cannot place on the hearth the smallest spark of this fire without wrapping the whole building in a conflagration, then I confess, we must bend all our moral powers against it; for we must abhor that conventional morality, which calls to the aid of virtue the incitements of vice. *Nunquam enim virtus vitio adjuvanda est, se contenta.* Experience must decide; but let it be a careful experience; let it not be based on a prejudiced observation, or a superficial insight into an inadequate number of facts.

In closing, indulge me in the liberty of suggesting one caution, which a review of the proceedings of this body may countenance the suspicion of not being wholly out of place. You meet here to propose plans; to look into the ideal world, and catch the impression of some pattern of perfection. You meet like the Athenians of old; *to tell and hear some new thing.* Perhaps it is right that man should always be straining after some model, more beautiful, than experience will ever supply. But is there not one danger? Is there not reason to fear that the mind, charmed with its own seeming discoveries, and surrounded by theories which glitter in speculation, should attempt to introduce its plans into practice a little too fast? The suspicion has sometimes flitted over my mind,

* Hardly a theory, however, for the whole world has said so.

in visiting our common schools since so many lectures have been given on the subject, that a plan, whatever it might have been in the hands of the originators; has not worked quite so well as was expected, in the secondary hands into which it has at last fallen. The advantages of the old way may be lost without an equivalent in the new way found. Some caution is necessary when a man is innovating on the wisdom of ages.

LECTURE V.

ON

THE BEST METHOD

OF

TEACHING THE ANCIENT LANGUAGES.

BY

ALPHEUS S. PACKARD.

ANCIENT LANGUAGES.

The subject of the present lecture is, the best method of teaching the ancient languages. Just and philosophical principles of instruction are no less important in this, than in the other departments of learning. To the want of such principles, or to the unskilful application of them, I ascribe much of the disposition, which has heretofore prevailed, to decry the value of classical studies. A branch of learning that is not well taught, will in most cases be poorly learned, and one that is superficially learned, cannot expect favor from a public, prone to think much of the useful. I do not appear before you with new facts or theories. I cannot hope to advance views which are not already familiar to those, who are in the habit of reflecting on the laws which regulate the acquisition or the communication of knowledge. I shall discuss as fully as my limits will allow, and in a plain and practical manner, what I believe to be the true method of instruction in the ancient languages, even though I may in some cases repeat what has been often said before.

Before proceeding in the discussion, it may be well to inquire how much is implied in the acquisition of the ancient languages. In general the acquisition of a language implies a familiarity with its forms, with its etymology, including the

principles which regulate the formation of its words, their derivation and their signification; and an intimate acquaintance with its laws of construction and with its idiomatic peculiarities; — such a command, in short, of the whole language as will enable one to think and speak in it. The acquisition of a living tongue in this sense of the expression is not uncommon; in respect to the ancient languages, at the present day, it is comparatively rare; nor is it a point at which we aim in our instructions, for the simple reason that these languages are to be *read* and not to be spoken. In regard to them, therefore, a lower standard of acquisition may satisfy us. Still, in our system of classical education, this standard must be high. A command of Latin or Greek, on the part of the pupil, sufficient to enable him to read with tolerable ease its lighter authors, (which may be acquired with little labor, and without much knowledge of its forms and principles), should not satisfy the teacher. Although these languages are to be read only, yet they are to be read with accuracy; and he alone can do this, who possesses an intimate acquaintance with their structure. I regard the study of them as a valuable source of mental discipline, and I would always deprecate any tendency in our modes of teaching them to superficial attainment. I would hold up then before the pupil, who would acquire a knowledge of the ancient languages, a standard of high, thorough scholarship; I would urge upon him to aim after a critical knowledge of their forms, their laws of construction, and their varied power, and to become deeply imbued with the spirit of their literature.

I would make another prefatory remark. In the subsequent discussion, I shall have in view pupils of the age at which boys usually commence the study of the ancient languages in our schools and seminaries of learning. It seemed necessary to state this, because the mode of teaching must be modified by the age and the circumstances of the pupil. One who is

young, or who is pursuing his studies alone, should be managed differently from him who is older or who is in a class; and one who has no knowledge of other languages, from one who has such knowledge.

In teaching a language, I apprehend, we should be guided by the same principles of instruction that we adopt in teaching other branches of knowledge. The pupil is to be made acquainted with facts and truths before unknown; and what reason can be assigned why, in the study of a language, so far as the nature of the case will allow, these facts and truths should not be presented to his mind precisely as in the study of a science. In this lecture, therefore, it will be my object, after a brief discussion of the general principles which should govern instruction in the other departments of knowledge, to show that the study of a language may, and ought to be conducted on these same principles. Having discussed the general principles of instruction in this department, I shall then remark on the more practical details. I ask your indulgence, then, in the first place, to a discussion of the general principles of instruction, and their application to the department of languages. This part of the discussion will be more extended than would be necessary, were it not the case, that some of the doctrines which I shall maintain have been misunderstood, and have been regarded by many as a sacrifice made to a spirit of innovation, at the expense of much that was truly valuable in former modes of instruction.

To him who undertakes the instruction of youthful studies, it is an important inquiry, how he may become what Quinctilian, in his admirable summary of the qualities of a consummate teacher, directs every teacher should be, *assiduus potius quam immodicus*; what method he should adopt, which, on the one hand, will render all necessary aid, and, on the other, not weary the youthful mind by ill directed efforts to urge it forward beyond its strength.

To one making such an inquiry it must be apparent that the course which nature points out is the best. I would, therefore, ask him to look where nature is the only teacher; I would ask him to observe the child in its early years, even when it has hardly ceased to utter the cries of infancy; and while he must admit that even then this child has acquired a knowledge which, in importance, far outweighs, and in amount, we might almost say, equals all that is accumulated by the labors of future years, I would inquire how has he attained all this knowledge? It is the result of careful observations of phenomena, of experiments repeated again and again, and modified in every possible way, and amid the distractions of his childish pains and pleasures. It is thus he has learned that the bodies around him are solid and extended, and do not constitute a part of himself; and also to distinguish the remote from the near, the high from the low. In this way has he discovered the effects of various substances upon his frame, and been taught to shun the hurtful and grasp what will contribute to his happiness or support; and what is more wonderful than all, thus has he acquired a facility of converting to his own use the vast and complicated instrument of thought, by which he expresses his wants and desires, his hopes and fears, his joys and sorrows. All these acquisitions are the results of an inductive process, which has been conducted in the mind of the little reasoner with an accuracy as unerring as that of which the most elevated philosophy can boast.

Again, as an indication of the will of nature on this subject, I might refer the inquirer to the philosopher who seeks to penetrate her mysteries. He carefully observes the facts which she presents to his notice, and thence infers her general laws. He observes the apples falling from the trees by a mysterious force, the nature of which he cannot discover; he sees that bodies fall in the same manner from the tops of the highest buildings, and from the summits of the highest mountains,

without the intensity of this force suffering any very obvious change; and the thought occurs to him, since the power of gravitation is not confined to bodies on the very surface of the earth, but extends to the highest objects where its presence can be tested by actual experiment, why may it not be found at much greater distances, and reach even to the moon? Why may not she in her orbit be acted upon by gravitation like bodies at the surface of the earth? and why may not the planets also with their satellites, be retained in their orbits by the same power? and by proceeding in this way, after a series of cautious experiments and observations, he at length infers the laws which regulate the motions of a whole system of worlds.

Were it necessary, other instances might be mentioned of the application of this same method in the investigation of truth. The wisdom of the statesman, which has been collected from careful observation of passing events and the wide experience of the ages that have gone, and which conducts with success the mighty affairs of an empire, and even the sagacity of the man of strong common sense, which enables him to accomplish the purposes of every day, are, no less than the most imposing discoveries of the philosopher, the results of a process of induction. In fine, every man of intelligence, though untaught in the methods of the schools, is, in truth, an inductive reasoner. And thus it is, that our knowledge of all that it is most important for us to know, of the existence of external objects apart from ourselves, of their qualities and effects, an ignorance of which might prove our immediate destruction; our knowledge of the laws which regulate the phenomena of nature, ever occurring to our notice, and which, if unexplained, would be a source of stupid wonder or groundless alarm; of our native tongue, without which, the voice of friendship, gaiety and joy would never be heard, and of the probable course of events, by which we are enabled to provide for the well-being of ourselves and others; all this vast amount of

knowledge is acquired by a process of induction, carried on in the mind, to a greater or less extent, from the earliest exercise of its powers to the last period of our earthly existence.

As it is in this way that we acquire most of our knowledge, the question now arises, what is the best method of communicating to others the results to which we have arrived? As it is thus that the body of laws and general principles is framed, which, taken together, constitute a science, how shall we best teach this science to a pupil? And I would ask, if acquisitions of the utmost importance to man, and most of the discoveries which have illustrated names distinguished in the annals of science, have been made by pursuing the method to which I have adverted; should we not regard these facts, as intimations from nature herself, by which she would point out to us the most sure and perfect way of directing the inquiries of those who are entering on the career of knowledge; and may we not safely conclude, that the pupil should be led to adopt the method of induction as it is commonly termed, in all cases where it can well be applied?

General truths may be presented to the mind in two different ways. We may either exhibit them to the pupil for him to treasure up in his mind, and leave it to his sagacity to discover their various applications to particular cases; or, as they are inferences from many particulars, we may place before him a succession of facts of the same kind, and then state the general conclusion that may be deduced from them. Take for example the general law of nature before referred to. He may be told, that the moon and planets, with their satellites, are all retained in their orbits by the same force of gravity which causes bodies near the surface of the earth to fall; or his attention may first be directed to the fact, that the pebble in his hand, as soon as he relaxes his grasp, falls to the earth; that this same pebble, if carried to the top of the highest building, or the summit of the most lofty mountain, is under

the influence of the same force, varying however according to a certain law, which may then be explained and demonstrated to him; let him then observe the moon revolving in her orbit, and be taught that the same force, varying according to the same law, will fully account for her revolutions; let him next look at the planets with their satellites, and be made to perceive that the law, shown to be applicable to the revolutions of the moon, may also be applied to their revolutions; and now have we impressed upon his mind this beautiful law of nature, with a distinctness and a permanency, which an awakened curiosity and an excited interest alone can impart.

It cannot fail to occur to every one, that by the latter method the truth which we would inculcate, is not only exhibited in a more interesting manner, but in a clearer and stronger light. Nor has the pupil, if the process has been well conducted, been a passive recipient of his knowledge; the energies of his own mind have aided him in his work, and having arrived at the sublime conclusion, if he has any love of knowledge, he cannot help enjoying, in some degree, the raptures which must have kindled in the soul of Newton, when he surveyed the noble achievement which the method of induction had enabled him to make. Facts should be first perceived and then the mind is prepared to apprehend the general conclusions which they authorize, or the laws which explain them. It is easy to apply this mode of instruction to all departments of knowledge which regard sensible phenomena; we are now prepared to inquire whether the same method can be used with advantage in the acquisition of a language.

Every language may be said to embrace a great variety of facts; in which term I would include its forms, the circumstances under which certain successions of these forms are found to exist, and its peculiarities of idiom;—all these are the facts of the language. That certain adjectives, for example, are followed by a certain form of nouns, is as properly a fact

to be explained by the grammar of the language in which it is found, as the production of cold by solution is one of the facts which it is the object of chemistry to explain. He, then, who commences the study of a language, is in the same situation with him who enters upon the study of a natural science. In both cases a confused mass of facts is presented, which are to be reduced to order, and to be arranged in various classes. Thence general conclusions are to be deduced, constituting in the one case the general principles of the science, and in the other the grammatical rules of the language. As in the pursuit of the sciences, so in acquiring a language, so far as is practicable, classes of facts should be considered, and in the order indicated by their mutual dependence on each other. When a number of facts of the same kind have thus been observed, let the rule or general law be stated, which may be inferred from them, and the learner is prepared to perceive its justness and to understand what is meant by a rule of grammar. In this way, the more common laws of the language may be successively illustrated, and the power of its forms, its cases, tenses, and moods, so far as they can be reduced to general rules. Having completed such a course, the pupil will have accomplished much of the labor of acquiring the language according to a method of induction, which nature taught him to use in its full extent, before he was capable of receiving the assistance of any other teacher. He has learned it much as he learned his native tongue, in his infant years, without the advantage indeed of hearing in the sounds of the new language the thrilling tones of a father's voice caressing his child, or maternal tenderness and love soothing his little disappointments and distresses, or the enlivening shouts of playmates, uttering the joy with which they engage in their boyish sports; but, not to mention other important advantages, with that, not then possessed, of an instructer's assistance, who has placed before him in succession facts of the same kind on which to ground

an induction, and in an order in which they never occur in the writings of men, or the common intercourse of life.

This method of teaching languages requires, it may be thought, in order to realize all its advantages, elementary books prepared in accordance with its principles; and I can perceive no reason why they may not be adapted to this, as well as to other methods of instruction. But this is not essential. Great improvements have been made in the elementary books of the Latin language at least, although my situation has precluded me from that experience, which would authorize my speaking of them in other than general terms. With these books, the skilful teacher may without difficulty avail himself of the principles of induction. He may also frame a series of exercises, in accordance with these principles, in connexion with the blackboard, which will, from their novelty, attract the attention of his pupils, and essentially promote their progress. My meaning is, that the teacher should gather his pupils around him, we will suppose once a day, and write on the blackboard simple examples, in such order as may seem best to him, which will illustrate those laws of the language they have already seen exemplified in their daily reading. Or he may let his pupils write at his dictation, which, besides that it answers every other purpose as well, will make them familiar with the orthography of the language. I know instances where this practice has been attended with great advantage. Exercises of this kind can be conducted, with as large classes as we can ever have in our schools, perfectly well. Nay, where a number participate, they awaken more spirit in the pupil than if he were alone.

The course once, I may say, not long since, generally pursued in teaching the ancient languages, it is well known, was the reverse of the method I am endeavoring to recommend. The first step taken by the learner, as I have too much reason to remember, was to go through with the appall-

ing labor of committing to memory a grammar of the language; and, having accomplished to the satisfaction of his instructor this irksome task, his constant occupation for months, he was then permitted to catch a faint glimpse of the object of all this toil, by being put to reading the language in the attractive form of a Latin Primer, or Liber Primus. I have often heard the scholars of a former generation, the laudatores temporis acti, recount with satisfaction the profitable toil with which, before they were admitted to the praxis of the language, they tasked their youthful memories with the larger part of the *Institutio Graecæ Grammatices Compendiaria in usum Regiæ Scholæ Westmonasteriensis*; and even now they can repeat with much complacency, and as volubly as ever, the old rules. *Verba incipiendi, desinendi, appetendi, amandi, recordandi, participandi, admirandi, genitivo gaudent, &c*, which were so deeply engraven on their minds, that the engrossing pursuits of even half a century have not been able to efface the lines, lines written on their memories in suffering and sorrow.

I am not aware that a mode of proceeding, so contrary to nature, is now pursued by any enlightened instructor. But objections have been advanced against what is termed the inductive method of teaching, which demand attention. They have arisen partly from misapprehension of the views of its advocates, and partly also from the unskilful manner with which it has been conducted by the inexperienced; in consequence of which it has not unfrequently failed of success; and then again, there has been so much said about novel modes of teaching, that the more deliberate and cautious have regarded with suspicion the innovations of the day, as little else than a covert for ignorance or vain pretension.

It has been objected to the inductive method, that it is the true method for him who is examining a new language which has never been subjected to the analysis of the grammarian; but when a language has been reduced to a system by the in-

vestigations of competent men, there is no reason, it is affirmed, why the learner should not avail himself of their results and thus save time and labor. In other words, the inductive method is the instrument of the discoverer, and not of the learner. The objection is founded in misapprehension. We do not put the pupil into the attitude of an original discoverer, with nothing to guide him but his own sagacity. We put him upon the track of discovery, if I may so express myself. We present facts to his notice, we select examples which will develope the phenomena of the language, in their natural relations, and assist him, so far as may be necessary, to form just conclusions. Nor need we fear that he will not infer his general laws and principles, especially if under the guidance of a skilful teacher. In this way, and no other, he learned his native language under disadvantages more serious than any with which he has now to contend. This inferring of general laws from particular facts, is as much an original principle of the human mind, as our belief in our own existence. Had he not possessed it and exercised it, his native tongue would have been to him a foreign tongue, and he would have needed masters, not merely as he now does, to teach him its principles, but to enable him even to share in the converse of relatives and friends. He cannot help exercising it in acquiring a new language, with its facts before him, any more than he could have helped inferring the general law, that, after exposure to the snows and chilling blasts of winter, the cheerful fire blazing on the paternal hearth would diffuse a genial warmth through his cold and shivering frame. No new process of thought, no new exercise of his intellectual powers is demanded. It is a process and an exercise perfectly familiar to him.

Nor need we fear that, by this method, habits of superficial study will be induced, for it has been objected, that by discarding the grammar, it lowers the standard of scholarship. That such has been in some cases the result of an attempt to prac-

tise these principles, I am aware, but it has been in consequence of negligence, or want of skill, on the part of instructers, and they alone, and not the principles are chargeable with it. But we do not discard the grammar. Let it be put into the pupil's hand, as a valuable auxiliary, at the outset, if you please; let him study it carefully, but only as he is prepared for it; when he has seen the general laws of the language illustrated in the course of his reading, and he has become familiar in a good degree with their application, then let him be put upon a course of thorough grammatical study; but we insist, that he should not be required to treasure up a mass of rules and general principles, which he cannot possibly understand, until he has observed their application in repeated instances, and felt the need of them. The point in controversy is precisely this, whether he should commence with the results of grammatical analysis, which he cannot understand until he has seen them confirmed and illustrated by many examples; or whether these examples should first be exhibited to his view, and then the general rules be stated, which he now perceives them to authorize, and which he might have inferred of himself as laws of the language.

To some it may appear, that too much importance is attached to this method of teaching, and that the principal inconvenience which the pupil suffers from the opposite method, is a loss of some time and labor, while on the other hand, in our efforts to make the study of a language more attractive to him we enervate his vigor. But such must bear in mind, that we are dealing with youthful powers; that what to manhood may seem a matter of trifling consequence, may to a youth prove a burden too hard to be borne. I know not to what source we may more safely ascribe the disgust to classical studies too often excited at their very commencement. The pleasure of attainment is felt even by a child, and, in the inductive method, if faithfully and judiciously pursued, he will enjoy the satisfaction

of a progress obvious and constantly increasing; and as each principle is deduced, he will be animated by the pleasure attending a discovery made by himself, and will feel an ardor exciting him to ascertain new proofs of its truth, and urging him on to other discoveries.

But these principles of instruction are of importance beyond the mere convenience of the learner; I refer to their influence on his intellectual habits. No one that hears me need be told how important a bearing the associations and manner of thinking of our early years have upon our subsequent intellectual progress. The pupil of the old system of instruction, imperceptibly and unavoidably imbibes the opinion, that languages are the deliberate, systematic contrivances of speculative grammarians. The effect of a notion so unphilosophical experience fully teaches us. It moreover makes the acquisition of a language too mechanical, too much a mere effort of memory.

Such habits of mind must tend to disqualify the pupil for future studies, that require the utmost intellectual exertion of which he is capable; and when we reflect that the best part of our days is too often devoted to the study of languages, in a way calculated to strengthen such habits, we must feel the importance of some remedy of these difficulties. In the method of analytical induction the remedy is found. As each rule is deduced, the pupil perceives it to be nothing more than a plain inference from many particulars, — an individual fact expressed in general terms; and besides acquiring just and philosophical views of the nature of grammar, a point of inestimable importance, his understanding is kept in constant and salutary exercise. The advantages, however, of this method are not confined in their operation to the labors of the common school. In the more advanced stage of his collegiate studies, the student will need to keep it in constant exercise; through all subsequent inquiries in the profound investigations

of criticism, it will be his most powerful instrument; and if habituated to the practice of it in his early years, he will acquire a sagacity and skill in seizing upon the facilities which it affords, that will impart to the results of his analysis the rapidity and clearness almost of intuitive perception.

But whether it be adopted in the first instance or not, he who has been favored by nature with a strong and vigorous understanding, must and will at length adopt it, if he would make extensive attainments in philology. Man is inventive and will always find means adapted to an end which he is resolved to attain. He will not long pursue a method against which nature utters a voice too loud for him not to hear. If therefore he has been toiling long in the beaten track, when he discovers his wanderings, he will retrace his steps and set out anew on the more direct way; regretting throughout his journey the useless labor that consumed the morning of his days, when with an invigorated frame and buoyant spirit he girded himself for the fatigues that awaited him. But it must be remembered that some less fortunate may never, like him, discover their mistake, but may continue to go more and more astray. The best years of life are thus often lost, in consequence of the pupil's acquiring habits of study and false notions which will ever cling to him, or which, like the garments of childhood, he must afterwards exchange for the dress of men.

Having thus endeavored to unfold what I conceive to be the true principles of instruction in the learned languages, I shall now proceed to remark on its more practical details. I would premise, however, that he knows little of the human mind, who should attempt to prescribe rules of invariable application. The skilful teacher will observe the peculiarities of his pupils, and adapt himself to them. Those who have arrived at maturity will require fewer particulars on which to found their conclusions, and may be left more to their own sa-

gacity. While therefore the same general principles should guide alike the inquiries of the full grown intellect and the feeble efforts of the youthful mind, they must be modified, so as to meet the circumstances of each.

I will suppose that a pupil presents himself before me to be taught the Latin or Greek language. I ought, at the outset, to be well aware of the difficulties with which he has to contend, that I may meet readily and successfully his wants. What then are the difficulties in the way of this pupil? In the first place, he has to learn the new language through the medium of another. This is a serious obstacle to the learner, as is apparent when we reflect, how much sooner they acquire a foreign tongue who are placed where they hear no other, and are compelled to make it the instrument even for the supply of their daily wants. Again, in the case before us, the new language is, in all respects, extremely different from that with which the pupil has been familiar. The relations which words bear to each other, are expressed in a way entirely novel to him. Yet more, he finds an arrangement of words wholly at variance with his experience, an arrangement which, in his view, seems 'confusion worse confounded.' It is important that he should be apprised of these peculiarities, that he may be prepared to encounter them; for it should always be an object with the teacher to relieve the pupil from all labor, which serves only to embarrass without producing any salutary exercise of his powers. And then, there is nothing to the beginner like the *viva voce* method of instruction. An explanation, a remark, which to us may appear of trivial importance, may be all important to him. It may save him hours of discouragement, animate him to exertion, and cheer him in his labors. Grammars and lexicons were the teachers of our youth far too much; many of us doubtless can say with deep feeling, while the living voice of the professed teacher was

like the voice of the living oracle, only to be heard when sought, and then giving often an uncertain, ambiguous answer.

I would, therefore, in the first place, select a passage which exhibits the most simple constructions and combinations of the language, and carefully read and translate it over and over, until the learner understands it and can translate it himself. While doing this, I would direct his attention to the nature of the language, and show him how it differs from what he has before observed in language. I would explain to him how, what he expresses in English by the aid of prepositions or auxiliaries, is often expressed in this new language by a mere change of termination, and how this change of termination enabled the ancient writers to express their ideas with clearness without adopting our arrangement of words. After a short interval I would have him translate the passage again himself. Exercises of this kind, continued according to the discretion of the teacher, would give him some idea of the character of the language. A suitable book for learners in his situation, one, for example, composed of short selections interesting in themselves, and written in the most simple style, would greatly facilitate his progress; but without an elementary book of the kind, (for with the best elementary books more will depend upon the teacher than upon anything else,) by pursuing this method with any author at hand, an important step will be taken in preparing the learner to observe for himself the phenomena of the language. In connexion with the exercises just mentioned, I should soon require him to commit thoroughly the more common forms of the grammar, as fast as he sees them exemplified in his daily reading; always carefully explaining to him before hand the effect produced by the changes in termination; in other words, teaching the signification of each case, number or person, as indicated by the termination; and I would have him repeat the same until he is master of the forms, and not only repeat them, but also write

out examples of them, as the exercise of writing will serve to imprint them upon the memory. A short time having been spent in this way, the discretion of the teacher must determine how long, the pupil may be left to the exercise of his own skill, aided by his grammar and lexicon, unless difficult constructions or obscure passages occur, all which should be carefully explained, for he has not had experience enough to enable him to grapple with them alone. An elementary book, I may here remark, on the plan of the Latin Translator of Cubi i Soler, is better adapted to the wants of learners than any I have seen, being furnished with copious notes which explain the peculiarities of idiom, the grammatical construction, in fine all the difficulties which are likely to occur to a beginner.

As the pupil advances in his reading, I would accustom him to analyze words and sentences, so far as his strength will allow, being careful not to embarrass him with grammatical distinctions with which he is as yet unable to cope, and being guided by the principle to proceed very gradually from the most simple, to the more complicated forms and combinations of the language. The study of the grammar should be continued in connexion with his reading and grammatical analysis, until at length he shall have made himself master of it. A caution here may be necessary. We may press grammatical analysis on the pupil until it becomes irksome. We must encourage him to advance in his reading as rapidly as circumstances will allow. The more he enlarges his experience in the language, the more he reads, the better prepared is he to enter with spirit into the distinctions and niceties of grammar. But this matter must be left to the discretion of the teacher.

At an early period I would have him commence the writing of exercises in the language, at first of the most simple character, and gradually exacting more effort. But these exercises must never be in advance of his experience gained by reading. They may, and ought to be so conducted, as to be

an application of principles, which have already become tolerably familiar, so that they will be rather a pleasing recreation than a task. This practice of writing exercises is apt to be neglected. There is in reality no method of acquiring a language more important, not because the pupil will find occasion for the exercise of his skill in Latin or Greek composition, but because, in this way, he will best become familiar with the idiomatic peculiarities of these languages, and his *copia verborum* be increased. After he has been in the practice of writing in the common way for some time, and has acquired some facility in translating common authors, as a most important aid in obtaining an intimate acquaintance with the structure and idiom of the language, I should put him to the practice of what is termed *double translation*, by which I mean, giving him a passage to render literally from Greek or Latin into English, and, after an interval, to turn back again into the original. A comparison of his own work with the original, will show him his deficiencies, and give him a correct knowledge of the idiom of the language better than any method with which I am acquainted. I may add, that he will by this means enter more fully into the peculiar characteristics of an author. Great stress is laid on the practice of double translation, by Cicero among the ancients, by Roger Ascham, and Sir William Jones, the latter of whom asserts, that one may by this method acquire any language in six months. The experience of all who have tried it, will bear witness to it as a powerful instrument in the acquisition of a language.

To the exercises which have been already recommended I would add, as one of great value, that of frequent reviewing. My own experience bears me out in the assertion, that the pupil cannot review too often what he reads. We have the authority of the best German teachers in its favor. 'What I choose,' says the celebrated Wyttenbach to his pupils, 'is this; that every day the task of the preceding day should be re-

viewed; at the end of every week, the task of the week, and at the end of every month, the studies of the month.' This was literally the practice of Gibbon, as he informs us in the journal of his studies, a book which it would be well for every student to have at hand, as affording a good model of the habits of study of the true scholar. Says Jahn, the eminent professor of the Oriental Languages, &c, in the University of Vienna, 'Languages should be learnt by efforts that are free and often repeated, rather than by violent efforts. This is a point which cannot be too strongly urged. Little children, for example, whose minds are unembarrassed and free from any violence, by constantly hearing others speak, soon attempt to express their own ideas in a similar way. In like manner, adults, who learn languages from books with a similar freedom of mind, should daily read, repeat what they read, and peruse and reperuse it, and assiduously persevere in this exercise of repeating, until what is read be deeply engraven upon the memory.' We may not indeed be able to carry this recommendation fully into practice with our pupils in the school, or the class room; but we should require, I am persuaded, frequent reviews in their regular exercises, and urge them upon them in their private studies.

Although a diligent use of the exercises already recommended, will ensure to the student, together with a knowledge of the structure and laws of the language, a copious vocabulary; yet it is important to remark on the methods which have expressly for their object the *acquisition of words;* because, though it is mainly a work of the memory alone, which should never be subjected to constrained effort, yet expedients may be adopted which will greatly facilitate it, and systems of instruction have been devised having this object especially in view. Let it be observed, that the method of induction has nothing to do with the acquisition of words, except in a case of doubtful usage, which can be determined only in accordance

with the principles of interpretation, by induction from particular facts.

I have already said that one serious obstacle in the way of the pupil is, that he is obliged to acquire a new language through the medium of another. Could he be placed where he would be compelled to use the new language, this difficulty would soon be removed. As the ancient languages are no longer the dialect even of the learned, we must remedy the difficulty as we best may. As a very simple, though much neglected means of meeting this difficulty, I would call in the aid of the *ear*, since in acquiring a language the ear is scarcely of less consequence than the eye. I should, therefore, accustom the pupil from the beginning to the practice of reading audibly, distinctly, with the proper emphasis and pauses, (which he cannot do without taking the sense as he reads) and with a correct pronunciation, every portion he attempts to analyze. He will thus associate the sense of the words with the sound, which is a great point to be gained. And here let me say, that an accurate pronunciation can be learned best, in the first instance, from the lips of the teacher. I had almost said that it can be only thus learned. The practice of translating from Latin or Greek into English, of writing exercises, in which important improvements, having a particular reference to this object, may be made upon the books now in common use, and the method of double translation, are all important auxiliaries in acquiring a command of words. Occasional exercises of a simple character with the black board, in which the instructer gives out easy sentences in English for the pupils to translate on the spot, he being their dictionary and grammar, are both interesting and profitable. They lead them to make a practical application of their knowledge, and will much increase their *copia verborum*.

In this connexion I would recommend the practice of committing to memory portions in the language. At what period

it should be commenced must be left to the teacher. But whoever has had experience of its utility, must be persuaded of its importance. If one would enter fully into the spirit of Demosthenes, he may repeat the reading of his strains of impassioned eloquence over and over again; but he will find that to commit them to memory and rehearse them, not as expressed in a foreign tongue, but as uttering the sentiments of his own heart, will clothe them with an energy which had before escaped his notice. Let our youth thus commit to memory the best portions of the classics, and they will imbibe more fully than is usually done their spirit, and apprehend more justly the genius of their language. Dr Parr introduced the custom of performing whole Greek Tragedies, with the exception of the chorus, into the Stanmore school, and advocated it as one which enabled his pupils, as no other could, to seize the true spirit of the dramatic poets. Milton, in his celebrated Tractate on Education, bears his testimony to the utility of this practice, and it is well known that it is extensively adopted in the classical schools of Europe.

Other methods, perhaps, besides those I have recommended, may be adopted with advantage. Indeed, it is not advisable to pursue an undeviating course. The zealous instructer will seek variety; he will be fruitful in devices for awakening an interest in the minds of his pupils and for aiding them in their course. There are, however, systems of instruction which take their rise from views differing in some respects from those now exhibited, which ought not to be passed without notice in a lecture on this occasion. I refer particularly to those which may properly be termed methods of translation; that which is known by the name of the *Hamiltonian System*, (although it is in fact recommended by some of the older writers on the subject of education) which, by means of strictly literal, interlinear translations, is designed to supersede the use of lexicons, and that which is pursued in the *Hazelwood School* in Eng-

land, which recommends the use of free translations. On these two systems I will now offer a few suggestions.

I may remark that they do not interfere at all with the inductive mode of teaching, their chief object being the acquisition of words. They are both designed for learners, and proceed upon the principle that the learner should not be subjected, at the commencement of his course, to the repulsive toil of seeking the meaning of words in the dictionary, when the process can be made much more easy for him. Says one of the ablest advocates of the Hamiltonian system, the object in looking into a dictionary can only be to exchange an unknown sound for one that is known, and the sooner this exchange is made the better.* I would be as far as any one from throwing unnecessary obstacles into the pupil's path; but after all, the acquisition of a language, especially of one of the languages of antiquity, must be a work of time and labor. It is true that the main business of the learner is to exchange unknown sounds for those that are known — or rather, I would say, to make unknown become known, familiar sounds; but how can this be done, unless by the process the sense of the sound is impressed upon the memory, and how can this be effected, when the substitute for the memory is directly under the pupil's eye. The efforts of the memory should doubtless be free, but the memory must be exercised. I have strongly recommended, on the part of the teacher, the practice of translating to the beginner, accompanied with such explanations and illustrations as he needs; and I know not what value can be attached to the mode of interlinear translation, which, while it supersedes the necessity of exertion on the part of the pupil, must, in my apprehension, neutralize the peculiar benefits of oral instruction.

It has been stated that the chief difficulty in the acquisition of a language is, that the learner is obliged to acquire it

* Ed. Rev. 44. vol.

through the medium of his mother tongue. A formidable objection to the system of interlinear translation is, that it brings the vernacular and the foreign language into immediate contact and thus perpetuates the difficulty mentioned.

Another objection to this system is, that it gives false ideas of the idiom of a language, as there are many phrases which do not admit of an interlinear verbal translation. Such are the principal objections I feel to the Hamiltonian System, as a mode of instruction for schools. That there are instances in which, under a careful, skilful instructer it has succeeded well, I doubt not, but as a method for the indiscriminate use of old and young, of the indolent and the studious, I should question the expediency of adopting it. In my view, the plan adopted by Cubi i Soler, to which I have already adverted, has none of the objections to which this is exposed, and possesses advantages which it has not.

In the Hazelwood school free translations are put into the hands of learners; as soon as they have come to read with fluency, they are discontinued. The system has not, therefore, the objectionable features of the one just mentioned. A careful examination by the instructer will detect indefinite notions and ignorance. My own views of the subject are, as before expressed, that it is well enough to allow the *beginner* the aid of a translation, but let it be from the mouth of the instructer accompanied with free explanations. In the case of a pupil just commencing the study of a language, there may, indeed, be no serious objection to the use of translations; but he should soon be left to his own resources aided by his instructer, and then I am persuaded that his progress will be more sure and more rapid, than if he has always within reach a translation to relieve him in every difficulty. He must, at some time, learn to depend on his own knowledge and ingenuity, and the sooner he begins to do this, within certain limitations, the better.

In regard to all systems designed to facilitate the progress of the learner, the following general remark is deserving of consideration. Every instructer has two classes of pupils; those who desire to *learn*, and who will make the right use of every means; and those who need to be urged, and who will convert every facility into a labor-saving contrivance. The latter is a numerous class in our schools and colleges, and in these institutions I am safe in affirming, that the experience of instructers regards translations, without an exception, as the bane of good scholarship. Let it be noticed, that the student in college, if he has been suitably prepared for his place, has passed the period during which, according to the systems under review, he may have access to translations.

In directing the classical studies of his pupils, the instructer should ever bear in mind, that the student ought not to be a student of words merely. It is not enough to make him a mere translator. A knowledge of language is of little value, except as it admits the possessor to a new field of thought, a new view of men. The languages of Greece and Rome are no longer living tongues — their voice is no longer heard; they utter the sentiments, they embody the character of ages long since past; modes of thinking, principles of action, customs and institutions, unlike anything we now know, gave them their peculiar characteristics. They contain a literature too, which in its simplicity, beauty and grandeur, has ever been the admiration of the world. Now, the fact that they are the languages of a distant and a peculiar age, imposes upon the instructer peculiar duties. More labor is implied in the just interpretation of them than in that of the modern languages of European nations, and much more effort, in order to enter into the genius of their literature. And yet, unless the pupil is initiated into the science of interpretation, a science, which, though its principles are the same, whether applied to ancient or modern languages, nevertheless, in regard to ancient tongues,

from the circumstances just adverted to, has been within a half century reared into one of the most important and interesting of the sciences; tasking the highest powers of man, scrutinizing with its piercing glances the whole range of profane and sacred literature, bringing into light what was before concealed in darkness, and clothing with a brighter radiance what was before known; unless, I say, the pupil is initiated into the science of interpretation, and has implanted within him the germs of a discriminating taste, he fails of securing the chief end of classical studies. He may have attained to a familiarity with the general principles of these languages, so that he can render into English with tolerable facility the more common authors, and yet, if this is all, he has only obtained the instrument. He has but entered the vestibule of the temple; and has seen nothing of the glories within. Let me not be understood to intimate that the language is to be acquired first, and the laws of interpretation and the character of its literature, afterwards. It is in vain to give rules to show how or when the pupil may be conducted to the higher results of classical studies. I say all that the case requires, when I affirm, that from the beginning he may be, and should be taught to be an interpreter of language; throughout his whole course, the great aim of the instructer should be to have him enter as much as possible into the modes of thinking of the authors he reads, and appreciate their merits. Whatever, therefore, will throw light upon his path, should be at hand, with the exception of plain translations, which most commonly cast so strong a glare upon the page as to cause the original text to disappear entirely. But the pupil should have access not only to classical dictionaries and other works which will illustrate the antiquities of Greece and Rome; but also to maps, plans and drawings of ancient ships, buildings, utensils, armor and costume; that he may form as definite ideas as possible of the objects perpetually occurring to his notice in

his reading, which is a point of great importance as a mere matter of discipline. With this apparatus at hand to assist him, he should be called upon to explain allusions, historical, mythological and such as relate to customs and manners, to relate in his words the story or to state the argument which he has been translating. By such a method of instruction he will insensibly acquire the habits of the interpreter, and of not being satisfied until he has obtained a full understanding of the authors that he reads. The instructer will of course supply what his pupils cannot find out by their own exertions, and, by remarks in the way of illustration or of apposite anecdote, contribute to their pleasure and animate them in their labors, as well as form them to habits of thorough scholarship, and imbue them with the principles of a correct taste. Did time allow, it might be profitable to dwell longer on this topic ; for it is apprehended that among the defects in classical instruction in this country, inattention to matters of taste and to the thorough interpretation of language, has been most prominent.

One other topic remains which demands our attention, although I can do little more than allude to it ; I mean the course of classical study usually pursued at our preparatory schools and colleges. An injudicious selection of text books may do much to thwart the best directed efforts of the teacher. It was the custom not many years since, in most of our schools, and is now the custom in some, for the learner to commence Virgil immediately after finishing his elementary books. But he is not then prepared even to translate the involved and figurative style of poetry ; and as for the art of the poet, or the unsurpassed elegance of his diction, they are wholly above him. There can be but one opinion on this point. If Virgil is rightly placed among the preparatory works, it should be read when the pupil has a tolerable command of the language. After the elementary books, Cæsar, Sallust, portions of Livy, and selections from Ovid, (which will be a good introduction

to the poetry of the language,) should be read before Virgil is attempted. As for the orations of Cicero, if they are to maintain their place among the preparatory books, they cannot, I am convinced, be read to much profit until the learner has gone through the authors which have been mentioned. They should be studied in connexion with the history of the events on which they are founded, and with the antiquities of Rome, so far as may be necessary to elucidate the forms of the Roman judiciary. How preposterous to require the learner to read an oration of the Great Roman Orator, when he knows nothing, it may be, even of the orator himself, nothing of the circumstances under which he appears, nothing of the Patres Conscripti, the Judices, the Consuls, the Prætor and the Forum, to all which allusions are constantly made! It is however a serious question, whether, in nine cases out of ten, the time devoted to Cicero's orations by students in our preparatory schools, is not well nigh lost. To understand the force of his argumentation, to appreciate his consummate skill and address and elegance — duly to estimate his great resources, by which he was enabled to bring all the learning of his age into entire subjection to that art, for which he lived and for which he died, would task the powers of the advanced scholar in our higher institutions.

Another custom prevails in all our institutions, on which I am aware there are different views among those, whose opinions merit the most respectful consideration. I refer to the use of books of extracts, from a variety of authors. On the principles which I have advanced, *elementary books*, which must be composed of selections, seem best adapted to the situation of beginners; but to books of this kind, excepting they are strictly elementary, I feel objections, which I will state without reserve.

In the first place, the extracts are generally too short to give the pupil an acquaintance with the style and manner of

an author; or they are so trivial in their character as to convey a false impression of his merits. In the Majora, for example, from the specimens which are given of Herodotus, the reader might justly infer, that the criticism of Gibbon is not unfounded, when he says, that Herodotus writes for children; and I would ask, who, from the few pages extracted from Thucydides, would be led to suppose that he wrote for statesmen, princes and philosophers? Who again, by reading the selections from the Odyssey, could form any just estimate of the beauty and power of the epic of Homer?

Again, it may be worth inquiry of what value in reality is his knowledge of the Greek language and literature, who has read short extracts in the Attic of Xenophon, then in the Ionic of Herodotus, next in the ancient dialect of Homer, and lastly in the Attic perhaps of Thucydides, Demosthenes, and others, with a mixture of the Doric of Theocritus and Pindar. Has he become well grounded in the Greek language by the study of such a medley of brief extracts?

The principal objection to books of extracts is, that they do not awaken a permanent interest in the mind of the pupil. This objection of itself, if well founded, is a fatal one. Students will not imbibe the spirit of Greek or Latin literature, and of course will not acquire a fondness for classical studies, nor make any very valuable attainments, if they are compelled to urge their way with wearisome steps through a copious medley of extracts from a variety of authors, differing in their subjects, in their style, and even in their language. My experience confirms me in the persuasion, that if a complete work be put into the hands of a student, interesting in itself, and he becomes master of that single work, he will have made a sensible advance in the language far beyond what he would have done by the same amount of reading in the usual way. He will surely have become acquainted with the characteristics of a particular author, which is not the case as

Greek studies are now conducted. Furthermore, I am persuaded, that a college course composed of a work of Xenophon, the best portion of Herodotus, that, for example which embraces the history of the Persian wars, the best books of the Iliad or the Odyssey, with one or two tragedies, will give the student a more extensive knowledge of the Greek language and a deeper interest in the study of its literature, than that which is generally adopted in our colleges. I am more confident in the truth of these views, as they coincide with the opinions of many of the most zealous and the most able instructers in our country; and if they are just, they demand the immediate attention of those who have in their keeping the interests of classical learning.

I have thus given my views of the general principles and the more important methods, which, I conceive will, under the guidance of skilful teachers, lead the learner to a thorough knowledge of the ancient languages. I could wish to have spoken more from my own experience in respect to elementary instruction in these languages, which requires more care and discrimination on the part of the teacher. I have sought the light shed upon the path of the instructer by those who have distinguished themselves, even among European teachers, and have recorded the result of their experience for our instruction, among whom I may mention the names of Roger Ascham, Tanaquil Faber, Wotton, Jahn, Michaelis, Gesenius, and Wyttenbach. And now I can only suggest the inquiry, whether in a course of instruction such as has been recommended, the pupil does not receive valuable discipline of his mental faculties. Is the study of languages, as thus conducted, the study of words, mere words? Is it not in truth the study of things? It is a strong argument in favor of mathematical studies, as a branch of the academic course, that the patient attention and powerful energies of mind which they require, must be admirably adapted to discipline and strengthen the intellectual powers. But it should be borne in mind that mathematical science

is founded on abstract principles and immutable relations, whereas the reasoning, which the student will most require in the business of life, relates to events contingent and changeful, and therefore not susceptible of demonstration. For this, the study of languages, if conducted as has been recommended, peculiarly qualifies him. It affords him, in every stage of his progress, wide scope for reasoning by induction from particulars, for the exercise of ingenuity in tracing analogies remote or near, and in eliciting truth from the mazes of uncertainty and vague conjecture. But farther, where can his imagination be better developed than in the school of Homer and Virgil? where will he imbibe the elements of a purer taste? By such a course, moreover, of reading, how much knowledge, of importance to him in whatever situation his lot may be cast, does he acquire of man, as he appeared in a most interesting period of the world's history and in most interesting nations. More than all, he is conducted to a point whence he may view a new domain in the world of mind. He is permitted to behold it, not as imperfectly delineated on a map, nor as dimly conceived from the descriptions of others, but his own eyes are entranced with the lovely vision. On this ground would I assert the claims of this department of learning to the high respect of the true friends of education. It may be made, it has been made too often, a mere study of words. But it should be, and it may be, a study of things also, of man — of mind, in some of its richest exhibitions.

LECTURE VI.

ON

JACOTOT'S METHOD OF INSTRUCTION.

BY

GEORGE W. GREENE.

The following pages contain a hasty exposition of some of the most important principles and exercises of Jacotot's method. Some of the illustrations were made under the writer's own eye, others have been extracted from the works of the founder. The confidence with which the results of the system are mentioned, has its origin in personal observation and research. The author is fully aware that these pages will not satisfy either the speculative examiner, or the practical teacher; they contain neither such an exposition of the theory, as is required by the one, nor the practical details, that are essential to the other. His warmest desires, however, will be fully gratified, if he succeeds in recommending his subject to public attention, and he trusts that in the course of a few months, he will be able to supply the deficiencies of the present production, by a full and practical account of the whole system.

GEORGE W. GREENE.

Providence, Oct. 6, 1833.

JACOTOT'S METHOD OF INSTRUCTION.

The subject to which I have the honor of inviting your attention, is the method of instruction, which was founded by Jacotot, and is generally distinguished by his name. There are, doubtless, many present, who are already familiar with its leading principles, but there must also be a large number to whom they are entirely new. I shall, therefore, most probably meet the views of this audience, if I confine myself to a practical account of the exercises, which distinguish this method, and indulge in no other observations than such as seem essential to a clear conception of the spirit of these exercises. It is from such an account alone, that our principles can be learned, and the teacher enabled to apply them; and it is only from such an account, that you can judge, whether this system should be confounded with the imperfect schemes of Hamilton, or whether it deserve the high honor to which it lays claim, of being the path through which nature, under the guidance of science, leads to the thorough attainment of knowledge.

In compliance with these views, I shall describe, as fully as the nature of the occasion will permit, the course, which we pursue in teaching some single science, and as our course is everywhere the same, a few observations will be sufficient to show how the same principles may be applied to every other

department of study. I have chosen the study of language for the subject of this development, both on account of the great portion of time which is everywhere devoted to it, and because we unite, with the study of forms, many other points, which the prevailing systems have unnaturally separated from it.

The choice of a text book is the first care of the instructor. In the seminaries of France, Fenelon's Telemachus is universally used for the study of native language, and the first book of it, for the epitome of foreign languages. But we are not restricted to this work; any other well written narrative of the same extent would lead to the same results. For my own part, I should always give to history the preference over fiction; another instructor might choose fiction; yet if we both followed with rigid exactitude the principles of the method, our scholars would equally reach the same point — the knowledge of the language.

Pronunciation is the next object of attention, if we are about to engage in the study of a foreign language — reading, if we are to take the first steps in our own. But as both these terms have practically the same meaning, it being the object of each to ascertain the value of certain conventional signs, the same course may be pursued in either case. We will consider the subject, therefore, with reference to pronunciation, and suppose the scholar to have before him the first page of the French Telemachus. *Calypso* is the first word that meets his eye. This the teacher pronounces slowly and distinctly, and requires the scholar to repeat it after him, until he has caught the proper sound. The next word is then added, and after having pronounced it separately, he unites the two together. In this manner the whole of the first sentence is read. As soon as by force of repetition he can utter these sounds correctly, his attention is fixed upon the syllables which represent them. He first decomposes the word into syllables, as *Ca-lyp-so*, and thus learns the value of the letters in their first

state of composition. He will, at the same time, observe the actual value of each single letter. He will perceive that *c* is hard like *k*, *a* broad like *ah*, that the sound of *y* resembles that of our *e*; while *l*, *p* and *s* retain the same power that they have in the English alphabet.

But many of these rules, although of general application, are varied by exceptions; and many letters lose their single sound in a compound which is altogether different. All these variations are carefully noted, and the same observation which has formed the rules, will easily collect the exceptions.

In the second lesson the student is required to read by himself all the words and syllables, which he can form by reference to those which he has already learned. If his first word begin with *a*, he will easily recall its sound by repeating *Calypso, sa:* if this *a* be followed by *i*, he will not hesitate about its sound, when he recollects *pouvait* and the other words of his first lesson in which it is found. In the same manner, he will remark what letters are silent, and the occasions in which they are so; the effect and use of accents, and, in short, all that relates to the power of letters and the sounds of words.

A certain portion of the work, either the first book or the first six books, are now marked out as the epitome. These the student learns by heart, not only so as to be able to repeat them, without hesitation, from beginning to end, but so that one part of a sentence may bring the other to mind, and a single word call up those with which it is connected. Together with the epitome, the student learns the translation of it, and repeats it as a part of his daily lesson. If this be interlined with the text, he will have no difficulty in assigning to each word its appropriate meaning; but if the order of the words be neglected, and their sense alone given, his task will be more or less difficult, according to the genius of the language. He therefore must change the manner of translation. In place of searching for the meaning of every word, he

should first translate by sentences. In a short time he will be able to point out those sentences of the text and translation, which correspond, and to associate the general sense of a paragraph, with the words which represent it.

The different parts of a sentence should now be examined, and when, by remarking the resemblance in form, by counting words, by observing the order of the stops, he has ascertained the meaning of the different members of a sentence, he should search for the exact sense of each single word.

The peculiar construction of some languages renders this search exceedingly difficult. Words, which, by the arrangement of our language, are placed together, are in these scattered through the various parts of the sentence, and those words placed last, to which our order gives the first place. Here, therefore, the student will be led, at first, into many mistakes. He will mistake the verb for its object, the adjective for its noun. Still, however, he cannot remain long in any important error. Every new line, each succeeding lesson, will throw light upon that which has preceded it. The thread of analogy, also, if he hold it fast, will guide him in safety through the mazes of this labyrinth. He will often find the same word repeated, both in the translation and in the text. Can he, in such a case, hesitate about its meaning? The same terminations will frequently recur, accompanied by a corresponding recurrence of some circumstance in the meaning and relation of words, which will serve as a clue to their sense. The same combinations of letters, will sometimes be found in the first or middle syllables of words that differ in every other respect. If the same ground-work of sense, which has been remarked in these words when differently combined, be now found in some word of the translation, it will be easy to assign these also to their corresponding terms.

In order to be assured that the scholar has availed himself of these means for translation, we should examine

him with the greatest minuteness. What is the English for *ne pouvait?* what the French, for *she often walked alone?* which word stands for often, which for walked? have you met *she* in more than one place? where? Had it then the same meaning which it has here?

We must make sure also, that he has not mistaken the general sense of the sentence.

Why could not Calypso be comforted?

On account of the departure of Ulysses.

Why did she walk alone?

Because she was sad.

Was the air of her island cold?

I do not know.

Look at your book.

Oh no! it could not have been cold, for an eternal spring reigned there.

What is a Goddess?

An immortal being served by nymphs.

Why do you say, an immortal being?

The book says — in being immortal.

Why, served by nymphs?

It is a fact from the book.

The answer to each of these questions, is found in the book. At first, only such questions should be asked, as have the answer in the same paragraph, or at least in the same page. But as the scholar gains practice, you may extend your examination to questions, whose answers are scattered throughout the whole extent of the epitome. He will then be obliged to exert both his memory and his observation, in collecting these scattered materials, and will learn to refer every detached sentence and every single passage to the subject with which it is connected.

But as we are careful not to ask any question, whose answer may not be found in the book, so do we rigidly reject every answer, which is not also there. No matter how limit-

ed the definition, which the student affixes to a separate word, or how incomplete the idea, which he derives from a full paragraph; no matter even if he have learned, from other sources, a more perfect reply to the question before him, we reject every detail, which is not drawn from the book, every idea, which is not the result of his own observation.

This observation is also made to embrace the forms and changes of words. Many words which terminate in *ait* are translated by a verb in the past tense; others, which terminate in *ant* are rendered by our participle in *ing;* while terminations are found in *er*, *ir*, *oir*, and *re*, which correspond to the English infinitive. These become day by day more familiar, and at length fasten upon the mind, so that the form of the ending becomes a key to the word.

Thus, as the student advances, he finds himself at every step upon firmer ground, and sees familiar forms constantly gathering around him. As he becomes more perfect in his epitome, he extends his remarks still further; new forms present themselves to enlarge his classes, and new examples rise to confirm his observations. Words are arranged according to the nature of their meaning and the form of their terminations, and, without consulting a grammar, the great features of etymology are distinctly drawn.

The study of grammar may now be entered upon with advantage, for the student's own observations have prepared his mind to understand and appreciate it. Hence it becomes a comparison of remarks, in lieu of a barren, because unconnected, study of forms. Let us apply it, by verifying some of the observations on nouns in Latin grammar, by Nepos' life of Miltiades.

'Nouns', says the grammar, 'are names of any person, place, or thing.'

Miltiades, *Cimonis*, are names of persons; *Lemnum*, *Delphos*, are names of places; *societatem*, *classe*, are names of things.

Substantives are of two kinds, common and proper, &c.

Classe is used in several places, in the first section, where Miltiades is represented as starting for the Chersonesus; in the fourth, where the generals of Darius approach Eubœa. This word, therefore, is common to the Greek and Persian fleets. But *Darius* and *Istro* are applied, the one, to a particular person, the other, to a particular object: they correspond, therefore, to the description of proper nouns.

In this manner we compare every principle and department of the grammar. The student first reads a description in the grammar, and then searches in his epitome for the examples, by which it should be justified. Or this order may be reversed and he may be required to compose a grammar for himself, before he is allowed to consult any work upon the principles of the language. But in either case, the study of the grammar should be continued, until every principle and all its details are indelibly impressed upon the mind.

Let it not be said, therefore, that we reject grammar, and suppose that a practical knowledge of the language is sufficient to form the accomplished scholar. No one, on the contrary, can estimate more justly than the scholars of Jacotot, the labors of those men, who have devoted their days to the intricate and laborious investigation of the forms and principles of language.

Yet we do not wish, simply to impress upon the minds of our scholars, the rules which others have formed, but to give them a spirit and a habit of study, by which they may draw from the work of any classic writer, the forms and principles of the language, which he has employed.

You can readily conceive, that the student who has gone through these exercises, will be perfectly familiar with his epitome: that he will not only understand the words of it, in the situation and form, in which he has met them, but will be able

to vary that form at pleasure, and recognise them, wherever they occur in his subsequent reading. He will thus be prepared for the exercise of narration.

Here, the instructor marks out a chapter or page, adapting the lesson to the readiness and good will of the scholar. This must first be translated in the manner which has already been described, and read over two or three times with the greatest attention. The scholar must then narrate all that he has retained of it, words, phrases, broken or entire, exactly in the order in which his memory calls them up. At first this narration will be very imperfect. The new words are difficult, the old, not yet sufficiently familiar: but above all, the memory not trained to that prompt exercise of its power, which arranges the drapery of our thoughts as rapidly as they arise in the mind. I have heard narrations, in which the only ten words, that the scholar could utter, were so mutilated, that I could scarcely understand them, with the book open before me. But we must bear with all this: too much rigor in the beginning of a study, depresses the scholar by filling his first view with nothing but the difficulties of his undertaking. Let him blunder boldly on, at first: praise him, even for doing badly, when you are convinced that he has tried, but could not do better; but at the same time observe carefully the growth of his confidence, and as you see this increase, call down his attention to the correctness of his exercises. This is the course, which we pursue in our own studies. We never obtain a full view of a subject, until we are far advanced in the investigation of it; the more difficult points, the remoter principles, the more delicate details, rise one by one to view, at each progressive step, and it is only when we have gone too far, to think of receding, that the science spreads out its whole extent before us.

The same course should be followed in the first narrations, and however imperfect, they should be received with approba-

tion. The scholar will soon find, that frequent exercise ensures facility; the words of the epitome will come in to aid his memory, when those of the author are forgotten; he will borrow some from the portions of the work, which he has already narrated, and his observations upon etymology, will enable him to give variety to his sentences, by varying the order and the form of the whole. He should now, therefore, be called on from time to time, to justify the words that he uses, and his manner of using them, and you may require at each new exercise, a more connected order of facts, a better selection of words, a fuller and more perfect narration.

A few weeks devoted to this exercise, will, in connexion with the epitome, enrich our student with a large stock of words, and forms, and phrases. He should continue his narration, but the exercise of imitation, should now be connected with it.

Whatever be the nature of the text book, it will be found to contain many facts, that will bear the same style of description. The minds of Calypso and of Philoctetes, are agitated by the same passion, but it has in each proceeded from a different source. Calypso grieves at her desertion by Ulysses, and Philoctetes, at having violated the faith, which he owed to his friend. By studying these two passages with attention, the student will perceive that he can apply to either, the language of the other.

Calypso could not be comforted for the departure of Ulysses.

Philoctetes could not be comforted for having revealed the secret of the death of Alcides, which he had sworn never to disclose.

In her grief she was rendered still more unhappy by being immortal.

In his grief, his misfortunes were rendered more severe by the recollection of his perjury, than by the inhuman desertion of the Greeks, the treachery of Ulysses, and the agony of his wound.

Thus the exercise of imitation, consists in applying to different facts, the same style of development, or description. In the course of this application, the order of the words is often changed and new phrases are gathered from other parts of the work to complete the expression of the idea. It is, in short, a second part of narration, the object of which, is (as in the first,) to enable the student to use this collection of words with ease and propriety. But while in the hurry of narration, he often uses an improper word, when the proper word is at hand, or mistakes the changes of termination, when he knows how to make it rightly ; he can in preparing his imitation, consider more attentively the order and choice of his words, and form himself to habits of correctness in the employment of them.

From his epitome, the scholar has gathered a stock of words and forms ; by the exercise of narration, he has enlarged this stock and accustomed himself to employ it with facility ; imitation has added correctness to this facility of expression: and from composition, he is to learn how these words, in which he has until now sought out the ideas of others, may be made the representatives of his own.

In the second book of Telemachus we find the description of a combat between Telemachus and a lion, that sprang suddenly upon the flock, which he was tending.

The scholar reads this description with the most confined attention. He weighs every line, searches out the sense of every sentence. What quality do you find portrayed in that description ?

Courage.

What then is a courageous man ?

' The courageous man is always prepared for combat, even when unsupported by arms. He knows how to avail himself of the most trifling advantages : the aspect of danger excites, instead of alarming him, and his valor gains strength, as perils thicken around him.'

Why do you say that the courageous man is always prepared for combat?

Telemachus was in no apprehension of danger, when the lion sprang upon his flock, yet he did not hesitate to attack him.

Why do you say, without arms?

He had nothing in hand but his crook.

What do you mean by the most trifling advantages?

He closed with the lion, because he perceived that his coat of mail would protect him from the lion's claws.

Such was the earliest efforts of one of our scholars. I have chosen it rather than a finished composition, because it is the first result of attention.

But it is very common to hear the scholar pretend, that he can see in the passage assigned to him nothing more than the simple fact. This is the excuse of laziness, and no regard should be paid to it. This same boy will speak eloquently, if you but excite his attention. Ball, wrestling, every favorite game and exercise, will call forth the most pertinent observations. Lead him to examine his subject, with the same spirit. He may, perhaps, see but little at first, but our first object is to call his attention, and convince him, that there is something there, which the observing mind cannot fail to discover. Draw from him, therefore, one thought, and you make the sequel sure; each succeeding effort will add strength to his powers of perception; constant exercise will make attentive observation a pleasure, and the more closely he examines, the more will he find to remark on every subject. We require in this, also, a rigid justification of ideas and of language. Every thought must be traced back to some fact in the subject, every expression must be grounded upon correspondent usage in the text.

But although correctness of thought and language, are the first points, to which we direct our efforts, yet even while

endeavoring after these, ideas of beauty and harmony will spontaneously mingle with our exertions. If the text book be properly chosen, it will furnish many examples, that can direct this march, and constant practice in composition, will soon form the ear to harmonious arrangement, and give the judgment that distinguishes the varying shades of language.

I am far, gentlemen, from offering these ideas as new: this is the style of writing which you have all admired, in our great classics. It was thus, that they studied their subjects, and formed their language. They have, it is true, chosen different fields for the exercise of their observation. Some have generalized the important events of history; while others have confined their attention to the acts of individuals, and to the humble walks of private life; but each has been praised for his profoundness of thought and keenness of perception, according as he has brought his glass close to the object of his study.

You are all familiar with the nature of synonymies. They follow next, in the usual order of our exercises and receive a large share of our attention. But as we pursue, in composing these, the same course that I have described in speaking of general composition, I shall not take up your time by a misplaced repetition.

The last exercise of which I shall speak at large, is one which the practice of all writers approves, but which I believe has seldom, (if ever,) been made the subject of special study. We call it translation. It resembles imitation in one respect, but differs from the exercise to which we have given that name, by being confined to the reflections and developments, rather than the language of the original passage.

We select a portion of the work which contains an exact description of some event, or a full development of some idea. The subject of composition is then chosen, and in treating it, we follow closely the order of the model. I will give you an

example of this exercise and the justification of it, as it was prepared and justified by one of Jacotot's own scholars. It describes the sorrows of the ambitious man, translated from the sorrows of Calypso.

'The ambitious man cannot be comforted for the loss of his titles and dignities. Overwhelmed by grief, his life becomes insupportable. He is abandoned by the flatterers, who had once surrounded, but who now fly from him. He turns within his own breast, but can find no consolation there. It is a frightful void, which he knows not how to fill. The favors that he once enjoyed, the projects that he had conceived, look now like a mocking dream. He is assailed on every side by bitter recollections, and his thoughts at each moment turn back to the object of his sorrow and despair.'

Where have you seen the expression, cannot be comforted?

In the first paragraph of the first book: Calypso could not be comforted.

Is the sentiment the same?

Certainly; for it was sorrow on both sides.

And this expression, — life becomes insupportable?

In the first book, Telemachus upon being condemned to slavery by Acestes, cries out, — take away the life which I can no longer support.

It does not seem to me that the circumstances correspond.

Yes: Telemachus is thinking of the sorrows of a condition which is worse than death.'

These examinations should be made in the language which the pupil is studying, and even when the instructor does not wish to speak the language, the pupil should always use it in his replies.

During the whole course of the exercises, which I have described, we persevere in a constant and exact repetition of all that has been learned. As the student passes to the second lesson of his epitome, he unites with it a repetition of the first.

No sooner has he completed one narration of his text book, than he passes to a second; this, also, but prepares the way for another, nor is he permitted to lay the volume aside, until every word and phrase has become as familiar as the colloquial expressions of his native tongue. When he can select from this mass, the words which are best adapted to represent his own thoughts, and they rise to his lip, or flow from his pen, as swiftly as the connecting idea flashes across his mind, when he feels the full, distinct sense of each word, and every varying shade that distinguishes it, is associated with each, then may he safely lay his book aside and seek in other writers, and in a wider field, to extend and to perfect his knowledge of the language. But until then, he has not, in our sense of the word, learned his text book, and without this knowledge, any other exercise would be a vain and fatal waste of time.

We insist, also, upon a constant reference of all that is learned, to the epitome. '*Omnes artes, quæ ad humanitatem pertinent, habent quoddam commune vinculum; et, quasi cognatione quâdam, inter se continentur.*' This common chain unites also the separate parts of each science, and gives to them the same harmonious connexion, which it carries throughout the whole range of science. It is the object of reference to gather up its uniting links, and to trace the union of all its parts, as we advance toward a knowledge of the whole. And it is by thus observing the connexion between that, which we are learning and that, which we already know, that we hope to form the spirit of analogy, which can advance from principles that are familiar, to those which the eye of discovery has not yet reached.

We refer, therefore, as fast as we learn it, one part of our epitome to the other. In narration we continue this reference, and every passage that will bear it, is referred to the epitome. By this, also, we seek to explain each difficult passage, and

whenever we meet a new form, we seek to impress it upon our minds by comparing it with those, which we have already learned. How often do we find passages in every study, of which scarcely any effort can make us masters. These, either depend upon some subsequent idea, which is essential to their clearness, or have connexion with some preceding principle, which holds the clue to their meaning. No sooner do you perceive this reference, than light flashes in upon them. How clear and simple do they then seem ; how do we wonder that we could not comprehend them before ; and as we catch the chain of their reasoning, or the force of each delicate or nervous expression, how much do we wonder that it has ever wearied us by its sameness, or perplexed by its obscurity.

I have spoken of the student as being required to translate his book, to trace analogies, or compose upon given subjects ; but I have not yet pointed out any manner of correcting these exercises, beyond a rigid justification by means of the text book. We in fact permit no other. Every acquisition is the student's own. It is the eye of the artist himself, that must fix the proportions of his piece, and the author's own taste must direct the choice of his words and the arrangement of his ideas. Now it is upon the habitual exercise of our faculties, that we depend for their prompt and regular action, nor does any one expect to use them successfully, who has not cultivated them with care. We hold, therefore, that the student ought always to commence by this cultivation, and endeavor to form, from the beginning, those habits, on which he must ultimately rely. Our students, accordingly, receive no other explanations or corrections, than those which may be drawn from repetition and reference. Nor has an experiment of twelve years discovered a single principle, which the student could not explain, by tracing out its relations, and weighing the facts, which attend its development.

Examples may be found in every part of our own country, which confirm this opinion. We find here, in a far greater

proportion than in any other land, men who, compelled by fortune to commence with the study of the world, have gleaned, from the hurried hours of active occupation, a few moments for the study of science. These men have usually commenced with some general principle, from the study of which, they have been hurried away by their more imperious avocations. In the intervals of labor at the work bench, or in the counting room, they have continued to repeat this, to examine it on every side, and compare it with the facts, which their own observation had collected. Another hour makes them masters of a new principle. This is instantly subjected to the same scrutiny, and as they compared the first with what they had known in life, they now establish the analogy between this principle and the first which was learned. While engaged in this, the active mind, which views a subject from every station, cannot fail to strike out some new path or illustrate the text by some new development. This (if I be not deceived) is the manner in which the practical men of our country are formed, and thus are collected those vast stores of learning, which are often the envy and admiration of the professional scholar.

The occasion will not permit me to develope this point, as its importance requires; neither can I now bring to its support the reasons, which give it so much weight with us. Combined with repetition and reference, it becomes the basis of our method, and the instructor, who should extend his explanations beyond those arbitrary signs to which no reason can give a clue, would mistake the system and betray his trust.

I have, thus far, spoken of this system with reference to language alone. But the same success which has attended it there, has crowned its application to every other department of study. In the seminaries of Paris I have seen it applied to the mathematics, from the elements of arithmetic to the most abstruse problems, that are solved by mathematical aid, to history, to geography, to philosophy, to the humble exercise of

writing, and to the more valued accomplishments of drawing and music. In each of these, we take the epitome for our starting point, and connect with it, as the student advances, narrations, imitations, composition, synonymies, while constant repetition makes every principle familiar, and minute reference binds them in one connected whole.

The mathematical epitome is composed of a few full propositions. These the student learns, and examines in the same manner, in which he studied the epitome of language. He then begins to read and narrate the text book. From the first rapid perusal, he gains a general idea of the science, and of the connexion which exists between its different parts. His lessons are then shortened, and in a second narration, his attention is confined to a minute examination of each department. He comes to this, prepared by an accurate knowledge of the relative importance of each, and constant reference to the epitome, and to the ground, that he has gone over, removes every perplexity. The various exercises that I have described are interwoven with this examination, and he may, in the course of it, boldly stretch out into new developments and general deductions, founding them upon essential truths, and guiding his march by closely woven analogy.

We thus reduce the method to one simple principle; learn well some part of the science that you wish to study, and refer all your subsequent reading to this. In language, a few pages, a few propositions in mathematics, a few pieces in music, in history, the events of some particular age, or nation, or individual life. Repeat these constantly, subject them to every species of scrutiny, observe above all, the relation that the different parts bear to one another, and to the whole. Then exercise the powers of your own mind upon these facts or principles and compare, and analyse, and compose, until they become your guides to other facts, and to principles still more remote.

This course evidently depends upon the belief, that the fundamental principles of science are few in number. The

varied process of calculation may be reduced to a few simple operations. The history of a single people presents but a closer view of the same picture, that we meet in the history of the whole world. The process of calculation may be enlarged or simplified, as you wish to embrace a wider range, or hasten to more rapid results; but the foundation remains unchanged. And if we strip history of the additional developments, which, in a particular period, particular circumstances have given it, we shall find that the same great truths have been the legacy of every age. For the spirit of man continues always the same, under similar circumstances. Deprived of science, and unacquainted with the pleasures which excite the desires of even the ignorant and slothful, we find him willing to drag on, day after day, in a listless existence, enlivened sometimes by the chace, to which his wants impel him, or embittered by the contentions, to which his pride calls him forth. Enlarge his views by the light of science, awaken his desires by the prospect of a higher grade of happiness, and he becomes the active aspiring being, whom every object in nature arouses to speculation, and to whom the most trivial occurrence reveals the path of improvement. His works, then, receive the impress of this spirit. He stamps it upon the humblest invention in mechanics and upon the sublimest discovery in philosophy. It marks the intercourse of man with man, in the daily occurrences of private life, and guides the movements of people with people, amid the shocks and tumult of political revolution.

Study, therefore, says Jacotot, the spirit of man if you wish to understand his works.

The closest analysis will reveal but a few simple elements which, under a thousand various forms of combination, are mingled and spread throughout the whole. They nerve the boldest flight of poetic fancy, they guide the deepest research of penetrating analysis. You will meet them at every turn and change of your path: though constantly varying in form, they remain ever the same: though occurring under a thousand

new aspects, the practised eye can always trace them to the true source; as the brawling stream that spreads green and freshness through the valley, may be followed up the rugged dell to the snowy mass that chills and glitters on the mountain peak.

I shall in conclusion hazard one remark upon the habits of study and of action, which this method has a tendency to form.

The responsibility of his success, remains with the student alone. He finds nothing, upon which he can lean for support, but his own exertions. His attention must be kept constantly active. He must observe and treasure up everything. There is not a point, which he can safely pass over, for he knows not how soon he may be obliged to refer to those, which at first view, seem the least important. No principle can be neglected, for his reference must embrace the whole range of his text. And he carries throughout the study the knowledge that every phrase must be applied to the expression of his own ideas, every principle to extend his knowledge of the subject. Thus he will lay hold on each new word, as eagerly, as in a language that we constantly need, but know imperfectly, we seize on every expression which can facilitate the utterance of our thoughts.

Besides the forms of science, there are rules which regulate these forms. These are not the results of arbitrary decision, or even of philosophic reasoning, but planted with the first seeds of human reason, they have spread and extended in proportion to the development of that reason.

These rules our students deduce for themselves from the facts which contain them. And they study these facts, therefore, with as much more attention than other students, as the discovery of rules, requires greater activity of mind than the application of them.

Nor can it be objected that this course will form a bold and froward spirit. Every rule must be traced back to the examples, in which it originated, every idea, compared with the facts

which suggested it. In this rigid and exact justification, there is no room for the action of an irregular fancy; no means of hastening from a few insulated facts to general and comprehensive deductions. But a habit of cautious, patient reasoning is formed, which founds its principles upon thorough investigation, and follows throughout its development an exact analogy.

Send out into the world a man of such habits. Let him there depend, (as we all must,) upon his own exertions. Let him be surrounded by the mingled crowd that ever beset our entrance upon life. Will he then lay aside his observation, as a scholar of the old school, his dictionary and grammar? Will he cease to compare, and verify, and generalize, as the other ceases to seek for roots and cases and moods? Or will he cautiously and watchfully mingle with the crowd, compare, generalize, analyze, and refer, until the same course that has brought him to the fountain head of science, shall lead him to a knowledge of the book of human nature?

We trust that he will; we trust that the habits which are formed in our school rooms, will become the habits of life; that the activity created there, will distinguish every future enterprise; that the influence which we exert, will extend its healthy power throughout all the labors and vicissitudes of maturer years.

Such are the leading principles and exercises of the method of Jacotot, as far as they can be described upon an occasion like this. I have omitted many details, which are important in practice, and some exercises, which form an essential part of a full course of study. I fear even that some principles may have received an appearance of obscurity and want of connection, from the hurried manner, in which they have been treated. If there be an excuse for such errors, I must seek it in the novelty of my present situation, and in the necessity of compressing the principles of an extensive method, within the limits of a single discourse.

LECTURE VII.

ON

THE BEST METHOD

OF

TEACHING GEOGRAPHY.

BY

WILLIAM C. WOODBRIDGE.

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In considering the method of teaching any science, the first and most important question, is, — *What are the objects to be attained?*

The *immediate*, and what are termed the *practical* benefits of the study of Geography, are generally supposed to consist in the superior skill it gives to the *sailor*, the *soldier*, the *missionary*, and the *traveller*, in their expeditions to various parts of the earth; or to the merchant, or the politician, or the man of benevolence, in their calculations of private or national affairs. It is indeed indispensable to all these. But by the very nature of our association, our attention is directed to this study as a *branch of instruction in our schools*, and he who should expect to qualify himself to circumnavigate the globe, or conduct the affairs of a shipping merchant, or the concerns of a nation, with no other knowledge than that which he obtains from the miniature outlines of the science which are found in our school books, would meet with ridicule, as well as disappointment.

For purposes like these, a minute acquaintance with a particular country or portion of the world is often most essential. Every new subject may require a long period of special study;

and the examination of authorities and maps far beyond the limits of a school-room. The method of study is here too obvious to be the subject of remark; for the object in view is, the *accumulation and recollection of every fact* which can be discovered on the given point. This, however, could not be attempted in a school, even if it were necessary to its pupils generally. We have then to consider what objects are *general*, and how the study can be arranged, so that *all* may derive the *utmost* benefit.

The first thought which presents itself to most parents, with reference to this study, is, that it is necessary to enable their children to *converse with others*, and to *take their station among* the well-informed community. Such a reason may be sufficient, with regard to the fashion of a garment or a mode of address; but in subjects of serious importance, we have high authority for saying, that this '*comparison of ourselves among ourselves*' is 'not wise.' There should be some *fixed standard*, to decide points so important as the studies of our childhood and youth; and the question must rather be — What *claim* has this science to be considered necessary to a well-informed man, and *why* is it useful as one of the studies of our youth?

It is said indeed to be one of the eyes of history; and without it neither the records of the past, nor the news of the day, can be understood. But the question still returns, what benefit is to be derived from these studies, which are, in fact, but branches of ancient and modern geography?

Perhaps we cannot answer the question better than by comparing those who are ignorant of this subject, with those to whom it is familiar.

The uninstructed knows not that there is a world beyond his sight. He has no idea that there can be other houses, or other modes of dress, or other articles of food, than those he

sees. He knows not that there is another language on earth, or another country or town besides his own. His standard of excellence is therefore, *just upon a level with the things that surround him.* There can be *nothing superior* in his estimation; and whatever is different, must be inferior, whether in manners, or dress, or arts, or sciences, or opinions, or faith. Whatever *appears* of a different character, however elevated it may in truth be above what he already knows, is received with contempt, or disgust, or prejudice. Such is the fact with the Chinese. To dress in white, for any other purpose but mourning, to salute a friend in the European style, or to eat with forks, in their view, indicates an inferior mind. Our arts and sciences are unworthy of their attention, our opinions and faith beneath their notice, and our pretensions, or those of our country to respect, are treated in the Celestial Empire, as those of a rustic would be in a fashionable assembly. All beyond its limits are '*barbarians.*' The whole effect of this 'comparison of ourselves among ourselves,' in a nation, or in a class room, is to excite, and to gratify vanity, to establish a low and imperfect standard of right, and propriety, and beauty, and excellence of all kinds; and to check or destroy our respect for others, and our benevolence toward those who differ from us.

But let us now examine an individual at the other extremity of the scale, whose mind has been expanded by the only perfect mode of studying Geography, a survey of the various portions of the earth itself. A veteran traveller has long since ceased to consider the color of a dress, or the form of a salutation, as essential to good sense or respectability. He has found that there are varieties of climate, and soil, and food, as pleasant as his own. That the mind and habits and views of man, like the works of nature, are endlessly varied, and still without any imperfection. He learns to wonder without condemning, and to smile at some new appearance without con-

tempt. He is prepared to receive, and to seek new articles of comfort or use, even from savages, and to acquire knowledge from the most ignorant. In short, one important support to his pride is taken away, one great obstacle to his benevolence is removed, and he is prepared to take his place as one of the family of man, instead of the mere citizen of a single state. He acquires an interest in the passing events of other countries, and is insensibly led on, if he have the spirit of benevolence within him, to desire, and even to seek, the happiness of his fellow men on the other side of the globe.

Such is, to some extent, the influence of the study of Geography at home, upon the mind of a child.

But this study, like every other which is concerned with the works of the Creator, ought to be so pursued as to *elevate* as well as to expand the mind — to lift the heart to God through the medium of his works and his unceasing providence, — as well as to warm it towards our fellow men. It must ever be remembered, that the more knowledge we acquire of physical science, *of mere visible things*, without associating them with the invisible author, the more do we become attached to earth, and the less likely to rise towards heaven. To this cause it is, and not to the nature of their studies, that we ought to ascribe the frequent infidelity of naturalists, and the teacher of Geography should take care not to lead his pupil into this error.

The foundation of geographical knowledge must be laid in a knowledge of the relative situation of places, and this, the pupils of our schools must acquire chiefly through the medium of *maps*.

The pupil must therefore be first prepared to understand the true nature of a map, as a miniature representation of the mere outlines of objects on the earth. He must learn to conceive of a sheet of paper, as containing mountains, rivers, and kingdoms, —to realize the imperfections of the representation, and to use it only as an aid to his imagination.

The map presents a shaded outline, which separates a large blank space, marked here and there with a dark spot, from another portion of the surface, crossed by crooked lines of various dimensions, marked with dots and little circles, and crowded with names. But this blank space, he must be taught, represents a wide blue ocean rolling in the majesty of its waves, and wafting navies on its bosom, or swallowing them up in its abysses. Those crooked lines are the emblems of noble rivers, flowing with irresistible strength, covered with ships, and teeming with animal life; and where they are crossed by another little line, he must imagine a cataract. Its banks, instead of being covered with *names*, are shaded with *lofty forests*, or spread into *beautiful, cultivated fields*, or enlivened by *villages*.

Where these circles are scattered up and down, there should be splendid cities and magnificent palaces, and crowds of ships, and a moving ocean of human beings. And those spots of various colors are the dominions of separate kings, and nations, inhabited by men — so distant from us, that they never heard of our pupils — so numerous, that he might go among them and come away, unnoticed.

In order to arrive at just conceptions of the kind, the study of Geography must commence with the elements. I do not mean with the *definitions* of land, and water, of mountains, and lakes, and rivers, and volcanoes, but with *the observation of the objects in nature around him*, which shall serve as the basis upon which these ideas may be founded. The name of mountain, and valley, and lake, and river, should be immediately connected with the observation of hill, and hollow, and pond, and brook, and the same process of enlargement should become familiar to his imagination, which is so beautifully exhibited in the 'Child's Book on the Soul,' in reference to time. He should be made to stand and watch the stream, and see it spread, and widen, and deepen, until it rolls on, a *mighty river*, whose farther bank is but just visible. He

should be accustomed to gaze at the mountain, or the hill, until you can spread its base, and rear its top, and put on house after house, and village after village, and call him to climb step after step up the slow ascent, and then point him upward to the distant summit, until he is weary with the thought. He should stand and look at the cascade or the mill-fall, until, by the aid of description, the sound increases to a roar, and the bank deepens to a precipice, and the opening below becomes an awful chasm filled with 'the noise of many waters.' Not till then should he hear the name of *Niagara*, which should embody all his loftiest emotions, and yet be presented as surpassing all that he *can* conceive.

But let us again ask — is it the *lines* and *spots* of the map, or the great *objects* they represent, which the pupil is to learn? If the latter, in what way is he to effect it? By gazing at these mystical marks, and committing to memory all the names attached to them? We have no patience with those who thus teach their pupils a science, which may be called *Chartology*, but has no more title to the name of Geography, than the giving names to an equal number of Chinese characters.

We have had the details of an instance in which a child of two years old, could point to every line and spot upon the map of Europe, only on hearing its name, before he could yet pronounce a word. But while we mourn over the mistaken kindness which could thus prepare an infant for the premature grave to which he descended, we do not envy the reputation of that teacher, who would be satisfied with making his pupils equally expert in this parrot-like exercise. We fear there are many such instances — nay, we suspect there are many schools where the ideas derived from the map, are just such as would be obtained from studying those charts of human life which represent an event by a promontory, difficulty by a whirlpool, and death by a torrent or water-fall, terminating in the beautifully ornamented border that surrounds this picture of time

and history! We are only less liable to be imposed upon by that which pretends to represent invisible things.

The first step necessary to enable the pupil to acquire ideas from representation, is to teach him the relation of the one to the other. Even the effect of pictures is often lost upon the young mind for want of a practical knowledge, or perception of perspective; and he supposes objects smaller or higher, from their appearances on the picture, or darker from their shade, because he has never been taught to observe the effect of distance and light. How much more liable is he to error, in regardtothena ked outlines, or mere indices of great objects, presented on a map. I know not any mode so effectual to make the pupil familiar with the nature of maps, as to teach him to construct them from nature, and this may be accomplished, at the same time that he is learning to observe the objects around him.

Let the course of observation to which we have referred, be extended to everything within his horizon, and let him learn the individual name attached to every object of importance. Let him learn to observe them from different points of view. Point out to him the varying position of the sun. Let him observe its direction in the morning, at noon, and at evening, — and then show him the north star, and he will thus find the marks for the four standard points to which he is to refer all descriptions of the situations of places. Let the terms, *east*, *south*, *west* and *north*, be attached to these points, only *when he has learned* the need of them; and not be employed before he has acquired distinct ideas of them. Next, let him observe the direction of the great objects of the landscape from one prominent point, then from another. Let him notice those which are in a range or '*row*' with each other from his station — those which are on opposite sides — those which would form a triangle — and those which would make a square, or a cross, and thus fix the positions of every important place in his mind,

so that he could sketch a map of these points and lines from his imagination as well as from direct perception.

But he must in the mean time be taught the construction of maps of a much smaller space. Let him draw upon the slate, no matter how rudely, a square to represent the table upon which he is writing, or the room in which he is sitting. If practicable let him look down upon it from the ceiling above, but in any event, let him mark the spot on which every object is placed, with its size and shape, as it *would appear* from above. As soon as he has repeated this so often that he perceives the want of accuracy in his rude representations, furnish him with a scale to measure the room or the table, and the distance of the respective objects from each other, and supply him with a smaller rule, adapted to the size of his slate, divided into an equal number of parts. Then direct him to transfer, after the measurement of every line or distance with the larger rule, an equal number of parts with the smaller upon his slate, until every object is represented in proportionate size, and relative situation, with a good degree of accuracy. This he will be told is a *plan* or *map*, and as his observations abroad are going on, he will probably be himself anxious, to employ the same method to represent the objects of the landscape in the same manner. He should be led on, however, by graduated steps. Let him draw an entire plan of the house in which he lives, of the garden attached to it, and of the farm, or grounds around it. So far as it is practicable, let every effort be followed by *measurement*, as in the map of a room, in order that the habit of accurate observation so valuable in life, may be cultivated at the same time that he acquires the correct idea of distances.

The pupil will now be prepared to delineate with more or less accuracy, the outlines of the country around him, and by observing carefully the ranges of objects, he may arrive at a tolerable degree of accuracy by mere inspection. He should be accustomed also to ascertain short distances, by paces, and

longer ones by an accurate observation of the time which is spent in passing over them, either on foot or in a carriage, and to register all the circumstances which are necessary for his map. As his perception of accuracy increases, he may be taught to trace the deviations from a straight line in a stream or a road; and if circumstances admit, he should be allowed the use of a chain or tape measure and a compass, as soon as he is capable of employing them.

Such is the course it is desirable to pursue, in order to be fully prepared for the study of maps; and I know not how we can otherwise avoid the danger of false or imperfect conceptions which will destroy half their value to the pupil. It is obvious, that it might be and ought to be commenced in the nursery, under the direction of the mother. It would serve as the amusement of many a listless moment, as soon as the child carries a slate and pencil. It might be carried on by any parent who can spend two or three hours in a week with his children, before they are ten years of age. If they are left to begin at school, no reason can be given why it should not be adopted by the instructor of a boarding-school. Indeed, there are few teachers of common schools, whose influence and usefulness with their pupils would not be increased, and whose labor would not be on the whole lightened, by the extra lessons and little excursions which it would render necessary.

After the pupil has become familiar with the construction of these simple maps, he should be taught to draw them on every variety of scale, until he ceases to think of the size of the map before him, and by immediate reference to the scale of measurement, should learn to perceive at once, through the medium of a map, the great objects which it represents, instead of the lines and points upon its surface, just as we perceive ideas through the medium of words. It will also facilitate his transition to other maps, if he be accustomed to draw a meridian through some prominent object from an observation of the

north star or a shadow at noon-day ; and to divide the map by other lines, drawn parallel and perpendicular to it at regular distances. It will aid still farther in his transitions, if the central line from east to west be assumed as an *equator*, and distances be reckoned in both directions, from this and the first meridian.

It is scarcely necessary to add, that as no description can be equally useful with the view of objects themselves, it is desirable that the pupil should learn the geography of the neighboring country, as well as his own town, as much as possible, from *personal observation*, and be accustomed to describe and delineate its outlines. It should only be after his own sketches are executed, that he should be furnished with more complete, engraved maps, of the same region.

Let me not be told that this is *theory*, plausible upon paper, but impracticable in its execution. It is but the *history* of what *has been done* and *still is done*, in the schools of Pestalozzi and his followers in Europe, and is in substance what must be done, by every one, who is designed to be a topographical or military engineer. It would require little more time thus to learn to delineate the great features of a country, if it were commenced at an early period, than it now does to imitate the letters of the alphabet. Every step is, in itself, perfectly practicable and easy. Only time and patience are necessary to combine them all, in an ordinary course of instruction. Where either of these fail, or where prejudice and avarice prevent the overtasked instructor from adopting this entire course, much may be done by devoting two or three hours in the week, for a short period, to this object. Some measures of this kind should always be taken, to prevent the blunders to which the uninitiated pupil is continually liable.

Much zealous argument has been spent on the question, *in what manner* the pupil should be led from the objects around, to the world beyond his horizon. Some maintain that he must

proceed step by step, in the radii of a circle, always assuming his own residence as the centre. But this appears too much like the precaution of the traveller, who never went so far but that he could return home at night; and at least is somewhat calculated to foster prejudices like those of the Chinese, who imagine the Celestial Empire to be the centre of the world.

Others suppose that it is proper to pass from one country and state, and empire, and continent, to another; but that the pupil must not by any means, be presented with the whole globe, till he has thus surveyed each portion in detail. But if this plan were correct, it has been playfully asked, if it might not be necessary to begin the description of a lion with his paw, and forbid the pupil to survey the whole animal, until he had examined every limb and joint in succession.

Both of these plans were designed to obviate another of great absurdity, which professed to give the pupil a distinct conception of the mountains, and rivers, and aspect of other countries, before he had observed even those of his own, or had any idea of the symbolical language of maps, in which they were described.

At this day, however, it would be universally agreed, that the transition should be made as much as possible from the visible to the invisible, from the known to the unknown. We think, on this ground, there is much force in the argument, adopted by a fellow laborer of Pestalozzi, that after a pupil has become familiar with the objects *around him*, the most easy and natural transition is to those which are visible *above him*. He was accustomed, as soon as his pupils became familiar with the geographical elements, in the manner we have described, to give them some general views of the subject of astronomy, and thus to present the earth as a globe, in the light reflected from the heavens.

It is said, with undoubted truth, that a child can have no

conception of the size or motion of the heavenly bodies; and we suspect it is equally true of the adult. We question, however, whether the idea of a globe, many times larger than the earth, moving in the heavens at the distance of millions of miles from us, is not as distinctly conceived by a child, as that of an empire, a million times larger than his own town, lying on the other side of our globe, and containing 200 millions of men, standing with their heads downward. There are those, however, who say that 'Children have no concern with matter or motion, thousands of miles from us.' Would not the same mode of reasoning exclude them from all knowledge of that invisible world, far more removed from their observation or powers of conception.

I have been struck with seeing this remark quoted, as the argument of one, who wished that the idea of a Deity should never be given to a child, and who was himself a reputed atheist.

I have sometimes thought, that after the elementary principles were perfectly familiar to the mind, the anxiety concerning the step by which the pupil is to pass the boundary of the horizon, and the precise course by which he was to be transported above the surface of the earth, so as to look down upon it as an entire globe, was almost as unnecessary as the question, which foot should be put foremost in commencing a journey. The comparative value of different methods, will rather depend upon the peculiar character of the teacher or pupil, or the circumstances in which instruction is given, than upon any abstract principles. I am more and more convinced of the importance of the principle, that the food of the mind, like that of the body, must not be uniformly of the same quality, or in the same quantity, but in both respects must be adapted to the constitution and state of the individual. To some minds, I believe that the conception of the earth as an entire globe, will be as easy as that of a single distant country, and many

will receive with equal ease, an idea of the solar system, sufficient to aid them in understanding the geography of the earth. On the other hand, I doubt not that there are many, whose minds would be confused by this mode of introducing the subject, and some, whose geographical knowledge cannot be extended beyond the limits of their own town or county without hazarding entire confusion, until they have attained to the age of youth or manhood. Such minds, however, must be left in a state more than usually contracted; and such we think must be the result with those, who are not permitted to learn anything beyond the limits of their native state, until they are familiar with every stream and village that belongs to it. A child would make slow progress in speech, who was not allowed to utter a second word, until he had pronounced the first with perfect accuracy.

But let us suppose this important step taken; let us consider the pupil as already possessing a distinct conception of the various divisions of land and water, as accustomed to form some idea of magnitude and distance, and so familiar with the symbolical language of geography that he instantly conceives, in looking at a map, of rivers and mountains, instead of waving lines and shaded spots — that he perceives land and water, where the map only presents light and shade, and imagines masses of buildings and collections of human beings, where the map only shows a circle, almost too small for observation. The question then arises, How shall he be best enabled to employ the more extended maps which are now presented to him, in acquiring a knowledge of the whole earth?

He is already supposed to be familiar with meridians and parallels of latitude, (although he may not know them by these *names*), and with the use of a first meridian, and of a central parallel, on the map of his town. Imaginary voyages round the globe from east to west, illustrated by an account of the difference of time, will make him acquainted with the

subject of *longitude*. Travels from north to south, accompanied with a description of the varieties of climate, will show him the necessity, and thus fix the recollection, of the equator and its parallel circles, and leave little to be explained on the subject of *latitude*.

With this preliminary knowledge, and his former practice in delineating, and reducing maps, on various scales, he is prepared to ascertain at once, without difficulty, the direction and distances of places on extensive maps. He will also be able to describe them in such a manner as to prove, and communicate, the knowledge he has acquired, as well as to understand the geographical descriptions of others.

So long as the maps generally in use in our schools are drawn with curve lines of latitude and longitude, it is peculiarly important, that the first delineations of the grand divisions of the earth presented to the pupil, should be upon the *globe*, for it will be otherwise impossible to explain to him the nature and construction of these maps, or to make him understand the various length of degrees, which he will soon perceive. This furnishes one argument of some importance, for making him early acquainted with the form of the earth; and if he is to be interrupted in his studies, as is sometimes the case, it would be far better for him to have lost some of the minute details, even of his own country, than this keystone of the science of geography.

Let us now inquire, whether any other instruments than ordinary maps can be employed with advantage, to render the study more interesting, or the ideas of the pupil more complete and accurate. In considering this part of the subject, I am bound to give the results of reflection and experiments on this subject for twenty years past, and shall of course be excused for the necessary allusions to the application of which I have made of them in several Geographical works.

It is evident that a perfect acquaintance with Geography,

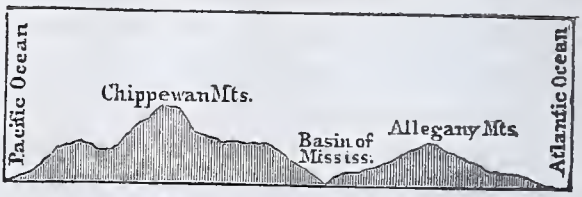
can only be acquired by traversing every country, and examining every city upon the globe, in the same manner as has been recommended for the native village. Were it possible, in place of this, to station ourselves at such a distance above the earth, that we could survey its countries, and their inhabitants, as they revolved beneath us, we might obtain general conceptions.

The more nearly we can approach to such a survey as this, the more distinct and correct will be our ideas of the globe we inhabit. As we have already seen, the meagre outlines of a map are altogether inadequate for this purpose, without *a constant effort of imagination*. How shall this be assisted?

The models of a country employed by military engineers, are a delightful aid to the fancy, in conceiving of the aspect of a country. In connection with these, the globe and maps in relief, where every mountain is prominent, and every river and ocean depressed below the level of the land, will do more to impress the mind of the pupil with the characteristic features of the earth, than any mode which could be devised. We earnestly wish they may be brought within the reach of our own schools. We would suggest to those who have leisure for this purpose, that it requires only time and patience to construct them of clay. The poor children of the school of Fellenberg, who had but few hours of release from manual labor daily, constructed two models of Switzerland in clay, which would give very distinct conceptions of the geography of that country, and they are used with great success in the instruction of younger pupils.

The only *substitute* for models of this kind, is the combination of maps with *sections* or *profiles* of a country, which represent by a continued line the variations of its surface, as in the following section of North America.

SECTION OF NORTH AMERICA.



The pupil may easily be made to understand them by pointing him to a road, cut through a hill, or by referring him to the map, and showing him how he must ascend and descend, in passing from one side of a continent to the other.

But sections, and even models of a country, can give the pupil no idea of the appearance of cities, of their inhabitants, of their building, or dresses, or employments, or customs; and we all know the imperfection of description on these points. Nothing excites the interest, or informs the minds of adults, more than models of all these objects, and no opportunity should be lost of showing the pupil those which are sometimes exhibited.

To most teachers, however, all these means are inaccessible. We must add, therefore, that a series of engravings representing the aspect of countries, and the various peculiarities to which we have alluded, are not less necessary to give the pupil *thorough instruction*, than to excite his interest. Indeed, the more we examine the human mind, the more we shall be led to perceive, that even the child has an appetite for knowledge; and that the interest he feels in any subject is proportioned to the *distinctness of the ideas which he receives.* The apathy and indifference which is sometimes the subject of punishment, is often the result of the imperfect manner in which knowledge is presented.

In the selection of these engravings, the *caricatures*, and exaggerations, and fancy pieces, too often presented in our elementary books, sometimes from the fault of the author, and sometimes of the engraver, render it necessary to say, that they

should be copied, as much as possible, from *genuine views;* and that there should be the same *strict regard to truth and accuracy*, as in the description of a country, or the numbers in a table. With every effort of the kind, the imperfections of copying and of printing, will produce sufficient deviations from the original.

These drawings should also be *characteristic*, adapted to bring out some striking feature in the country or the people, which may serve as an emblem to be associated with it in the mind of the pupil; and it should be of such a kind as to deserve, and receive, the same study as the text which it illustrates.

The *execution* should be good also; for there is no sufficient reason for injuring the taste of the pupil, in order to amuse him; and a *well written description* is much more likely to improve the child in geography, and mental power, than *a badly executed engraving*.

The same caution is necessary here, as in regard to maps; and the pupil will be in danger of dwelling upon the mere *exterior* of things, unless you lead him to employ his imagination in animating the landscape, and peopling the houses and cities.

The same general course of reasoning has led me to employ a species of maps, in which figures and emblems should be connected with the map itself, and thus render it, as much as possible, a substitute for a general survey of the world. It is obvious, that for the sake of the eye, if not of the mind, each series of objects and illustrations should be separate. But if all are thus connected immediately with the outlines of the map, the association of the objects with the country will be much stronger, and much more easily impressed, than it can be by the description. For the most vivid description must first be clothed with the form and color of a picture, and then transferred by the imagination of the pupil to a map, already crowded with lines and names.

It was with this view that I connected with a system of

geography, a chart representing the principal animals of the earth, in their respective regions. The same general plan led to the preparation of a chart of vegetation, in which the extent to which each plant is distributed is represented. The limited space which can be allowed rendered it necessary to employ the names of plants, and lines to indicate their diffusion, instead of drawings.

But in order to employ to the utmost, the power of association, and to compel the pupil as far as possible to attach each characteristic of a nation to the spot on which they reside, I have been led to resort to the use of *emblems*.

The diffusion of knowledge and civilization, so far as I am informed, was first represented on *geographical maps*, in the atlas to the Rudiments of Geography in 1820. It has since received the high sanction of Dupin, the great French economist; and has met with universal approbation in the work afterwards published by him, on the state of education and resources of France. It was natural to add to this, the names and number of the people, thus blessed with light or shrouded in darkness.

The emblems of religion and power are almost as familiarly employed for these subjects in common language, as those of light and darkness to indicate the intellectual condition of a people. The customary symbols among us of Christianity and Mahomedanism, the cross and the crescent seemed, therefore, as appropriate to the outline of the country as to the standards of its armies. If they can inspire the courage of soldiers, they are likely to assist the imagination of children, and are at least adapted to engage the attention, and impress the memory. The same is true of the emblems of government. The insertion of a crown on the island of Great Britain, would be only an earlier introduction to the language of our newspapers; and the stars which indicate our own government, are but copied from the striking emblems on the American banner.

In this way, the outline of each country embraces on one chart, shades, and figures, and emblems, which impress the pupil, at once, with the number of inhabitants, the state of knowledge and arts among them, their religion and their government, and the emblematic picture, thus presented, has been found in the experience of thousands, to produce a vividness of impression, and a distinctness of recollection, far beyond that of any description. It is indeed, but an application of a maxim, sanctioned both by antiquity and universal consent.

Segnius irritant animos demissa per aurem
Quam quæ sunt oculis subjecta fidelibus.

And I cannot but avail myself of the authority of Watts, as expressed in his translation,

—— The faithful eye —
Will aid the less retentive ear.

We doubt not, however, that there are teachers and pupils who would on this, as on every other subject, be most benefited by some mode of illustration peculiar to their own mind. In regard to all the instruments we have described, it must be remembered, that representations and emblems are only useful when they assist us in arriving at the reality; and that when our attention is fixed on these, as the ultimate objects of study, they are worse than useless.

With regard to *the manner of studying the maps*, much has been said on the use of written or printed questions. They are certainly *not essential* to an intelligent teacher, or a well taught pupil. But if they are written by one who is more familiar with the subject than the mere student of elementary works can be, they may suggest to *both*, new subjects or new modes of inquiry. To young teachers, so numerous in our country, they are *indispensable;* and the experienced teacher will often find that they render the task of instruction far more easy, with the multitude of ill trained and inferior minds. Indeed, if any improvement can be made in the modes of

teaching by interrogation, if one method is calculated to ascertain the knowledge and excite the attention of the pupil more than another, I see not how it can be spread throughout our country, but by a system of questions, attached to our elementary books.

No principle seems more obvious with regard to the manner of study of maps, than that the great natural features of the earth, and the boundaries formed by the hand of the Creator, should be examined before we enter upon the works of man, or the changing limits which Kings and Emperors have ordained. In this way, we establish permanent ideas, and render Geography, in our own minds, a fixed science. But on the plan which connects all our knowledge with the name and boundaries of states, we are liable to be thrown into confusion by every new war, and by every treaty of peace. Indeed, the mind of a child is often involved, by this method, in inexplicable mystery. I well recollect one who could not cease to wonder, in comparing the varied lists of animals in neighboring countries, how they could be kept within their proper bounds. As well might the anatomist divide the human body into regions corresponding to the garments which cover it, as the geographer establish his science, on the basis of human laws, or diplomatic treaties.

Let the pupil then first be made acquainted with the great natural boundaries of mountains and highlands, which divide the continents, and with the basins which they contain. Let him become familiar with the great streams to which all others in these empires of nature are tributary, and then trace out their branches. Let him not leave them until he is familiar with the origin and course, and length of each, and so far as is practicable, of the length to which they may be navigated. It is highly desirable that this part of the course of instruction should be given by means of *outline maps* only, containing no objects or boundaries but those belonging to

physical geography. Every school ought to possess a set of outline maps on a large scale, which would not only assist the pupil in this respect, but would serve as the means of thorough examination for each in presence of the class.

But whether this be practicable or not, it is highly important that the pupil should be accustomed to delineate the outline of every basin and continent as he advances, at first from the map itself, but ultimately from memory, until it is as easy for him to write down his recollections of geography in the language of maps, as in the letters of his mother tongue.

I may be allowed to repeat here an opinion which I expressed twelve years since, in a work published on this subject, that no mode of recitation from the maps is more easy or accurate, than to require the pupils to delineate the outlines, simultaneously on the slate or black-board. It is an application of the method of mutual instruction, which, so far as I know, had not at that time been made in the schools on that plan; and yet it combines all the inducements to accuracy in the individual, and fixed attention in every member of the class, which are peculiar to the system. The utility of this plan has been abundantly proved since that period by the experience of many instructors; and I cannot better describe it than in the language then used.

'Let the pupils be seated at a desk, before the instructor, each with a small slate, and a set of directions like the following be given them.

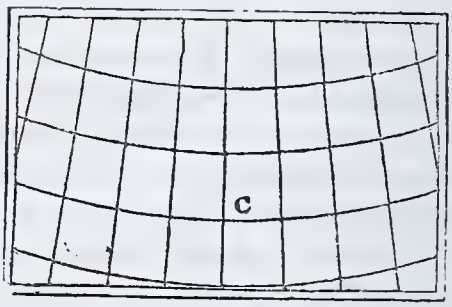
'*Draw the outlines of England. Write the names of the seas and countries around it. Draw the river Thames,—the Severn &c.,—Mark the place of London,—of Liverpool, &c.*

'Let each direction be executed by all at once, in silence, and their slates then exhibited to the instructor for correction. It is believed that no method of examination will be more rapid, or more decisive as to the knowledge of the pupils:

and that none will excite more interest in their minds. The same method may be applied to the charts also.'*

If this method be found too difficult for the first step, with younger pupils, the use of *ontline maps* containing only the outlines of the country without names, followed by those of *skeleton maps* like the annexed specimen, which contain only the lines of latitude and longitude to assist in drawing, will render the transition easy.

SKELETON MAPS.



'Let the pupil, first, be required to observe the outlines of countries, the course of rivers and positions of places on the map, so carefully that he shall be able to point out every object, and write its name, without hesitation, upon the outline map. Let the names be written in pencil by every pupil in the class, *as a mode of recitation*, without allowing him to consult any other map. Let them be erased, and re-written, until it is done with familiarity and ease. Let him next proceed to the skeleton map, and draw, first, the outlines, and then the mountains, lakes and rivers of each country, with the aid of the lines of latitude and longitude, which will render the task comparatively easy. Let him next mark the boundaries of states, or countries; and finally, insert the names. When he can accomplish this with ease, he will be prepared to draw from recollection alone; and may gradually be led

* Preface to the Rudiments of Geography.

to acquire a firmness and boldness of hand, and an accuracy of memory, which will enable him to delineate the outline of a country, with the same rapidity that the painter sketches the features of a face ; or to draw the course of a river, as readily as he writes its name.'*

When the pupil is thus familiar with the mere outline of a continent, its capes, and bays, and islands, its mountains, rivers, and lakes, he should be taught to trace carefully, the *declivities*, or ' fall of the land ' of each basin ; and, if practicable, he should be made acquainted with its geological character, and the most important and interesting volcanoes, caverns, and mines connected with it, which may serve to render his task lighter, and his recollection more agreeable.

As soon as the outlines and general features of the surface of the earth are thus made familiar, or indeed while this study is going on, the mind of the pupil should be constantly assisted in that course of comparison to which it is naturally inclined. It should thus be led as easily as possible, from its native hills, and valleys, and streams, to those grand objects which must be the standard of comparison in the survey of the world ; and great care must be taken that the process of multiplication and addition be not so rapid as to produce confusion, instead of useful ideas. It should then be accustomed to *compare* these objects, in every point which has been made known, whether of distance, magnitude, or other characteristics. It should be led on until it arranges all the facts it acquires, in *classes*, which serve at once to assist the memory and to exercise the reason.

Indeed, it is only by this process of comparison, that the great objects of geography — the expansion of the mind, and the discipline of the reflective powers — can be attained.

The man who has geographical knowledge, however great

* Geographical Copy Book consisting of outline and skeleton maps.

it may be, merely *deposited*, in separate portions in his memory, is no more than a moving gazetteer; and has little advantage over him, who has the same facts collected in a well arranged library, except that they are in a more portable form.

It is not until this comparison is carried to the point of classification, that the pupil can consider himself as possessed of a scientific knowledge of geography. It is only in this mode, that this study can be made subservient to his progress in other sciences.

After the pupil has thus become familiar with the solid and watery portions of the earth, a knowledge of the atmosphere, and its temperature and changes in different portions of the earth, becomes necessary. It is not only important in itself, but it is the only means of forming a geographical classification of the productions of the earth. It is in the state of the atmosphere that we find the boundaries which separate the varied tribes of vegetables and animals, and even of *men*, when considered merely in reference to their form, and color, and constitutional traits.

This subject cannot be thoroughly understood without some knowledge of astronomical geography; and it is but trifling, to withhold from a student any portion of a science, which is necessary to the successful pursuit of the rest, because its acquisition is difficult. The mind, like the body, cannot attain its strength without vigorous exercise, and he who does not encounter difficulties, can never attain either moral or intellectual energy. But my own experience, and that of many with whom I have conversed, leads me to believe that this subject is by no means so incomprehensible to the young, as some are disposed to imagine. If the *parent* would prepare his child, or if the teacher has time to assist his pupil, by calling him to observe the position of the sun from day to day, and from month to month, through the whole year, the subject will be rendered much more tangible. But even if it be im-

perfectly understood, it will be better, than to leave the pupil to lay up in his memory a mass of unconnected and incongruous facts, and the mere effort to comprehend them, while it will encourage the spirit of inquiry, which the instructor is obliged to repress on the opposite plan, will serve to fix the results more firmly in his mind.

But whether this or any other plan be adopted, it is easy to point out the general divisions of the atmosphere, as distinguished by heat and cold, and to trace them, not merely by the records of the thermometer, but by the character and species of the vegetable and animal tribes. The pupil will soon perceive that while the grand divisions of climate depend upon the annual and diurnal revolutions of the earth, yet no lines of latitude can be assumed as *precise* boundaries. He will perceive the modifications of temperature produced by the varieties of soil, from the sandy desert, to the fertile lowland, or the lofty table-land. He must be led to understand the different effects of the sun, upon the ocean and the land, and the variations of dryness and weight in the atmosphere, the winds which result from these causes, and the seeming contradiction to the laws of astronomy, to which they give rise.

He will thus be prepared to trace with delight, the boundaries of the most remarkable plants, the limits of various tribes of animals, and the wonderful adaptation of both to the character and wants of man, as they are varied with the climate he inhabits. I believe no one who has ever adopted this method of instruction, will hesitate to say, that in this way a more correct idea is gained of the productions of the earth, and with more pleasure and ease to the pupil, than by the most curious and extensive catalogues of plants and animals, which are ever attached to the government of a king, or the name of a state. It is difficult to suppress a smile, when we fairly consider the idea of grouping together the everlasting moun

tains and the broad rivers, and the extended lakes, the birds of the air, the beasts of the field, and even the fishes of the sea, under the dominion of a human governor, who controls the inhabitants of one spot upon the earth, and in this manner, to teach *the science of geography!*

I cannot pass by this portion of the subject without observing, that it seems quite as important to draw upon special maps, the boundaries of these regions of temperature, as of the empires controlled by human power, and to insert the names of plants and animals, as well as those of rivers and cities.

The pupil is now supposed to be familiar with the great features of the surface of the earth, and with its most important productions and animals. He must next turn to him who is its chief inhabitant and master, and become acquainted with the works, and institutions, and character of man. The order of nature requires us to consider the human race as one family, to ascertain the character and residence of its various tribes, and to learn something of their intellectual and moral characteristics, before we attempt to investigate the government, and institutions, and cities, and arts, and commerce of any single country.

The natural history of mankind, as divided into races by their form and features, and subdivided into families by the wide distinction of language, is of deep and universal interest, and cannot be considered under the name of any continent or empire. The character of men, however, is so much modified by their political and religious institutions that it cannot be traced entirely, like that of animals and plants, to the original stock, or to the physical character of the country in which they reside. And this character, in its turn, affects the state of agriculture, manufactures and commerce.

It appears therefore as necessary, to commence the examination of human beings by considering the political, literary

and religious institutions which form them, as to describe the climate and soil which affect the character of vegetation.

At the same time, it is obvious, that the effects of such institutions, like that of climate, do not depend upon the name or situation of the country in which they exist, and that it is equally inconsistent with natural and scientific order, to separate the effects of despotism in China, from those which are perceived in Russia, or to speak of the influence of Christianity, as if it were dependent upon the boundaries of states.

If this reasoning be correct, mankind ought to be considered, in their connected capacity as a race, and in their great subdivisions, as influenced by external circumstances, before they are treated as the mere subjects of a king or an emperor, or as the citizens of a single state. The same advantages will follow, and the same evils will be prevented in the mind of the pupil, as in the case of Physical Geography, and he will be more likely to consider himself as one of the great family of man, united to all by the indissoluble ties of brotherhood. It is equally obvious, that the opposite plan of introducing the pupil to the knowledge of men, as if they all belonged to distinct nations, must tend to diminish his sympathy with them as his fellow beings, and render still stronger, that exclusive regard for his own country, and that jealousy of others, which needs to be repressed. He will be more likely to arrive at the sublime, christian sentiment of *Fenelon*, which has been so unjustly credited to the school of Godwin. 'I love my family better than myself; I love my country better than my family; but I love the human race better than my country.'

It is not till after this course of general study is completed, that the pupil should be required to attend to the description of individual states, and the details of Civil and Statistical Geography. He should first meet his fellow men, as in one great assembly, before he follows the respective families to their places of abode, or attempts to observe their internal regulations.

He should begin his study of each country, with the consideration of its physical condition and resources, as developed in his previous views of the world. He should observe the extent of its sea-coast, the number and size of its streams, the general character of its climate, as affected by its place upon the globe, and by peculiar circumstances, and the vegetable productions to which it is adapted. He should then be taught any peculiarities which exist in its physical character, and should be led to infer from the whole, its capacities and resources, and the employments most likely to promote the welfare of its inhabitants.

A closer view of its political, social and religious institutions, and habits, will too often present sad obstacles to the accomplishment of the best plans, and he should next be taught the actual condition of knowledge, of morals and agriculture, and arts and commerce, as resulting from the combined action of physical and moral causes. He should be led to appreciate the national character connected with these circumstances, so far as this can be done with accuracy, and without that gross injustice which sometimes attributes the peculiarities of a small class, to the people of a whole country; which would make the Portuguese all assassins, and the people of New England, a nation of pedlars.

He should now become acquainted with the topography of the country, its principal cities and towns, and its most important public institutions, humane, religious and literary.

This survey should be completed by an examination of its statistics, the number of its inhabitants, the manner in which they are distributed, the density of population, the amount of commerce, manufactures, revenue, and public debt; and the magnitude of its army and navy.

The extent to which these details should be carried, must of course be varied according to the character and circumstances of a pupil, and the time which may be devoted to this study.

They should be carried as far as the judgment of the pupil can employ them, in estimating the state and resources of the country. They should never be so much extended, as to burden the memory. The difficulty of retaining numbers, and the frequent changes which take place, render it much safer to consult a recent gazeteer for these particulars, than to depend upon an over-charged memory. Younger pupils, it is obvious, can derive little benefit from any part of this knowledge, except the extent and population of countries and the number of inhabitants of the principal cities.

Even these, however, cannot be retained with facility, nor can they be employed for the purpose of comparison for which numbers are chiefly useful, without some species of classification. On such points, particularly, all our conceptions of great and small, many and few, are founded entirely upon comparison. It is far more important and useful to the pupil to know, that London contains as many people as the whole state of Virginia, than to be able to tell the precise number of inhabitants in either, and the population of both would be more easily remembered by associating them together. And his conception of the populousness of a town or city, which approaches to his own in magnitude, will be much more assisted by telling him that it is twice, or thrice, or ten times as large as his native place, than by stating the precise number of people it contains. Few persons can estimate or conceive of numbers of people, even to hundreds or a few thousands, much less of an equal number of square miles. The mind is confused by higher numbers, and can only arrive at distinct conceptions by referring to some known standard, approaching in magnitude to that presented, instead of being obliged to compare it with unity.

It is the method which is resorted to in every case in common life, when comparisons are made by means of numbers; and there seems to be no original reason why the extent of

countries should not be compared by square inches, as well as the population by units. There is needed, in Geography, some such simple mode of enumeration as is furnished by the companies, and regiments, and brigades of an army; and I can conceive of no mode by which this can be more easily introduced, than by a well-arranged series of ranks and classes. It was on these grounds that I introduced a system of classification, — the first which was published so far as I am informed, — into the Rudiments of Geography.

With a view of preserving an uninterrupted order, I have deferred to this place the remark, that a course of *preliminary lessons* is as necessary in civil and political, as in physical geography. It is as unwise to introduce the pupil to the subject of *government*, by presenting to him a king or an emperor, as it would be to describe a *mountain* before he had been led to observe a *hill*.

The family and the school are the model states from which the child should derive his elementary conceptions of government; and even the village will furnish him with miniature examples, of arts, manufactures, and commerce, and with painful illustrations of the various degrees of knowledge and civilization.

Let the child, therefore, at the same time that he is acquiring the habit of examining and comparing the objects of nature, be also led to observe the employments and relations of the people around him. It will not be difficult to give him the conception of a monarchy, from a simple reference to the government of a family; nor to make him comprehend the difference between mild and arbitrary modes of government. The voluntary associations of his school-mates in their plans and sports, may very easily be used to illustrate the nature of a republic; and that admirable mode of school discipline, which consults, so far as is safe, the wishes and views of the pupils, while it reserves a veto to the teacher, will give a very tolerable conception of a *mixed* government.

In regard to *religions*, we need not say that *one* should be familiar to the mind of every pupil, and the transition to others is too easy to require illustration. But he will not be so likely to observe and compare the *employments* of different members of the community, and the relations to which it gives rise, unless his attention is particularly called to it. Very little effort, however, on the part of the parent or teacher, will make him perfectly familiar with the idea of the division of labor, of the agricultural, manufacturing, and commercial classes of towns, or countries. He need not be carried beyond the limits of a farm, or a work-shop, in order to be made familiar with the meaning of *exports* and *imports* and *trade*, terms so often involved in a cloud of mystery, in the mind of the young geographer.

In closing, we would also remind our hearers of one of our introductory remarks, that the study of physical science, if it is accompanied by no higher associations than general laws, will only fasten our minds more firmly to the material world, and fix our eyes more intently upon the earth, instead of raising them to heaven.

Let every step of the study, therefore, be accompanied by questions and remarks, which will lead the pupil to feel that the perishing objects of earth are not the *end* of his studies, but only the means to lead him ultimately far above them. When his imagination is excited by the wonders of nature, and his mind absorbed in admiration, remind him of that Being, who saith to the sea, ' Thus far shalt thou come, but no farther.' Who ' looketh on the earth, and it trembleth, who toucheth the hills, and they smoke.' When he thinks of the productions of the earth, remind him of that kind Providence that, ' causeth his sun to shine upon the evil and the good,' and his rain to descend upon those who honor, and those who despise him.

And when he examines the character of man, teach him

to trace the connection of scientific and religious knowledge. Show him how light follows in the train of Christianity; and fail not to inform him, how emphatically, 'the dark places of the earth, are the habitations of cruelty.' Lead him back to that period, when the rocks of our druid ancestors streamed with the blood of human victims; and let him learn from the decay and despotism of corrupted countries, that pure religion is the best, and the *only* preservative of national prosperity, and personal liberty.

With a course such as we have described, the great objects of Geography, seem to me, to be best accomplished. I feel, and have already urged, the necessity of adapting methods to the minds of individual teachers and pupils; but it is difficult to conceive how they can be attained by any methods, which are not founded upon these great principles.

LECTURE VIII.

ON

THE NECESSITY

OF

EDUCATING TEACHERS.

BY

SAMUEL R. HALL.

EDUCATING TEACHERS.

Of few things are the community at large more deeply convinced, than that the majority of school teachers are greatly deficient in the qualifications, which their office requires. Although there may be, and certainly *are* honorable exceptions, the fact which I have now stated is so notorious, that but few comparatively, of those who teach, will deny, that their professional preparation has been lamentably defective.

Intelligent and benevolent individuals, in all parts of the land, have seen and lamented this evil. Many parents, too many, have not only seen, but deeply feel it, in the ruin of their fondest hopes, with respect to their beloved children.

The pulpit — the press — the legislative assembliesof the country, have long been uttering the same voice of warning on this subject; — they have admonished us, in the most explicit manner, of the awful consequences of committing the education of our children to such unskilful hands. Ithas had, however, but little effect. The work of reform moves on as sluggishly as ever. The evil still exists: — even the question, whether it admits of a remedy, has not yet become a matter of serious and practical inquiry. It is humiliating to do it, — but I am compelled to confess here, in an assembly composed of descendants from the pilgrims, and in this thirtythird year of the nineteenth century, that there is not in our whole country,

one seminary, where the educator of children can be thoroughly qualified for his important work. There is not even on the western continent either a society or seminary, adequate to the removal of an evil, as great, if not beyond comparison greater than any, demanding the attention of the patriot or the christian.

On any other subject of equal importance, spirit-stirring appeals would be made from one end of the land to the other. A remedy would be speedily found and applied. But in reference to *this* subject, what has been *done?* What has been *attempted?* Hundreds of thousands of children are every year committed to the care of teachers, very unfit for their work, at the imminent hazard, it is manifest, of all that we hold precious in our civil and religious institutions.

I speak of a state of things, which must excite the surprise and astonishment of every reflecting mind. Where shall we look for an explanation, which will justify it? Is there anything peculiar in the institutions, transmitted to us by our fathers, which will account for it? It will not be pretended. Shall we refer it to the existing government and laws of the country? It is impossible. Is it because the people of this country are so *selfish*, so *calculating* in their views, that they neglect thus the education of their children? How wretched the economy, which to amass for them a fortune, 'starves their intellect, impoverishes their heart.' We boast of our intelligence. Can it be, that an intelligent people will be indifferent respecting the character of those, who are to make the rising generation *intelligent?* Is it a mark of intelligence to educate men for every other art and profession, except that of training the mind and forming the habits of the young? Our fathers have bequeathed to us a rich legacy in providing, at such expense of blood and treasure, the happy form of government, under which we live. But who does not know, that the pillars, which support it, are the virtue and intelligence of the people? We cease to be a *free* people, the moment we

cease to be a *well instructed, virtuous* people. Is this peculiarity of our civil condition a reason why we should be indifferent respecting the means of education? It suggests a motive certainly for attention to the subject, which no man, who loves his country, can consistently disregard.

We look in vain, however, for adequate reasons to justify the indifference so prevalent in regard to the character of teachers. Obvious as it is upon the slightest reflection, not only that their standard of qualifications should be immeasurably elevated, but that their number should be at this moment more than doubled, it is still a deplorable fact, that no well digested plans have been yet proposed and *executed* to secure either of these important results. There would be less occasion to wonder at this, if the people of the United States were in the habit of showing a similar apathy in reference to other enterprises, even those of inferior importance to that of which I am speaking. But what say facts on this point? A canal is needed from the Hudson to the lakes. Can it be made, is the first inquiry. The unhesitating answer is, yes; and the call for millions of capital, which accompanies it, is responded to, as soon as it is made. The money is furnished; and the next step, which remains, is immediately taken. The work is *begun* and *finished*. It is represented, that rail roads connecting this city with Lowell, Worcester and Providence, will be of great public utility. True, hills of granite must be broken through — valleys must be filled up — rivers must be crossed, and a thousand obstacles surmounted. But the enterprise is practicable — is commenced and completed. Engineers, laborers and funds are found without difficulty. Take another example. A monument, perpetuating the achievements of Bunker hill, is due, it is thought, to the fathers of the Revolution, from their happy, grateful descendants. What money is needed for the purpose? it is asked. Half a million of dollars is no obstacle in the way. Let it be erected — we will provide the sum, ten thousand citizens instantly respond.

It is not with any design of censuring them, that I allude to facts of this nature. I rejoice, that canals can be dug, — rail roads constructed, — and monumental columns reared.

'To tell of glories past and deeds of valor.'

It is well, these things *should* be done. They are honorable witnesses to our enterprise and thrift and public spirit. But who will assume the responsibility of making the assertion, that our varied applications of the steam-power, our rail roads and canals will add half so much to our security, happiness, or even wealth, as that course of education, which would make our children industrious, intelligent and virtuous, — which would result in securing to them health of body and mind, and which aims also to fit them for the service of Him, who is the rightful proprietor of all that they have and all that they are.

And what has yet been done, for accomplishing these results? True, we have schools of high merit, where the powers of the intellect are cultivated. Our colleges, and professional seminaries are ornaments as well as blessings to the land. Many men have been educated in them, who have done honor to the country, and benefited the world. We have also hospitals for the sick — schools for the deaf and the blind; asylums for those deprived of reason, and a multitude of *practical schools* for teaching and learning the trades and arts of life. But where is the *educator* to find that instruction, so essential to his success in the arduous employment of guiding the footsteps of the young in the paths of virtue and knowledge?

It is not thought that a man is qualified to offer his services in the healing art, till he has been under the care of learned lecturers, who, by description and demonstration, can illustrate the thousand 'Ills that flesh is heir to,' and make him acquainted with the various modes of treating the diseases of the body. But where are learned lecturers employed in making the future instructors of our youth familiar with the

character and the mode of treating the more dangerous diseases of the intellect and the heart?

I wish to present to my hearers, just views of this deficiency, and can do it better perhaps by contrast than otherwise. It will be excused, if concurring as I fully do in the sentiments, I avail myself also to some extent of the language of one,* who has been long occupied in zealous endeavors to promote the cause of sound learning and human happiness.

'If we wish for the most common article of comfort or convenience, we are anxious to find some one to supply our necessities, who has been trained to the business of furnishing a supply. We wish a *teacher*, but hardly make inquiry what are his claims to adequate qualifications. Are we satisfied with a divine, a lawyer or physician, who has qualified himself, or pretended to do so, for his profession by solitary, unaided, unadvised, *untaught* or *inexperienced* efforts? We do not do this — Why then do we not require in the instructors of our youth, to whom we commit our offspring, an adequate preparation for their most responsible employment?

This preparatory discipline is considered indispensable, not merely for the learned professions, but for the ordinary occupations of life. A term of years, usually seven years, is required to fulfil the duties of an apprenticeship to any of the mechanical trades. An artisan does not dare solicit the patronage of the public, till he has undergone this apprenticeship. This training under the instruction of experienced masters, is deemed of still more importance, in what are termed the *liberal arts*, such as painting, sculpture and engraving. To foster them, academies are formed, models are collected, lectures are delivered, and the young noviciate is willing to devote years of patient and assiduous labor to fit him for success in his profession. We hear too, of what is termed a

* Rev. Mr Gallaudet, late Principal of the Hartford Asylum for the deaf and dumb.

regular bred merchant, and the drilling of the counter and counting house is considered indispensable to prepare one for all the complicated transactions of trade and commerce. And if men are to be trained to *arms*, academies are established, at which experience, ingenuity and science are put in requisition, to qualify the young for military exploits. In fact, there is scarce any pursuit, connected with the business of life, but what men have endeavored to render successful, by a process predicated on well known principles of human nature; by making it in the first place, a distinct profession, or calling, and then, by yielding to those who have long been engaged in it, the deference which their experience justly demands; and finally, by *compelling* those who would wish to adopt it, to devote themselves to it, and to pass through all the preparatory steps, which are necessary for the consummation of their acquaintance, both with its theory and practice.

In this way only do we hope to form good mechanics, painters, engravers, sculptors, farmers, merchants, physicians and lawyers.

Perhaps some may think my illustrations of too humble a kind. But my subject is a practical one, and I intend to treat it in a practical way. Permit me then to inquire of my readers — if when they wish for a *shoe* they do not take considerable pains to find a *first rate* workman; one who has learned the trade well, and can execute his work in the best manner? And when our wives and daughters want a new dress or new bonnet, will they not make a great many inquiries and take not a few steps, and consume no inconsiderable portion of very valuable time, to ascertain the important fact, who is the most skilful and tasteful milliner and seamstress within their reach? Are they not willing to undergo many inconveniences, and wait till their patience is almost exhausted, and their wants very clamorous, in order to obtain the precious satisfaction of having their work done by hands whose

skill and ingenuity have long been tested, and on whose experience in adjusting colors and qualities and proportions and symmetry and shape, they can safely rely?

Is a *shoe* or *bonnet*, a coat or hat, to be put in requisition with an immortal mind? In the article of dress, to clothe frail and perishable bodies, will you be so scrupulous in the choice of persons to make them, and yet feel no solicitude about the qualifications of those to whom is entrusted the formation of the habits, thoughts and feelings of a soul that is to live forever? a preparation for their task — an apprenticeship to their calling, a devotedness to a pursuit, which involves all that can affect the tenderest sympathies of a kind parent? the most ardent hopes of a true patriot? the most expanded views of a sincere philanthropist — the most benevolent wishes of a devout christian?

Is human ingenuity and skill to be on the alert in almost every other field of enterprise but this? How can we reconcile our apathy on this subject with our duty to our *children*, our country and our God?' Especially, when education, properly explained, means the cultivation of all the powers of body and mind, is designed to fit the person for acting and thinking right in all the circumstances and vicissitudes of life?

Shall I be told that we have already schools *enough*, and that every child in the whole community can be well educated, if he desires it? This is more easily asserted than proved. We have not schools enough to furnish adequate instruction in the *common branches* of education, reading, writing, arithmetic, geography and grammar. Statistics, sufficiently accurate to be depended on as data, show that eighty thousand children in New England and New York, are totally unprovided with proper schools, and are growing up in ignorance. But were every child furnished with the opportunity of learning to read and write, &c, is this enough? Is this education sufficient to qualify him for the duties of an American citizen,

and for the happiness of social life? In what proportion of the schools at present existing, are the obligations of the young, as members of civil society, citizens of a republic, and especially as moral agents in the kingdom of God, urged with proper earnestness and frequency upon their attention? Where are children taught, habitually, those things which most directly qualify them for the duties of social intercourse?

Will any say, that we have a hundred and fifty high schools and academies in New England, and that these, together with our free schools, furnish opportunity to educate all who need instruction? If we assign fifty pupils to each academy, we have provision for less than eight thousand; while in the State of Maine alone, there are more than thirtysix thousand, who do not attend any school.

It is well known that a large proportion of the youth in New England do not attend the common schools after they are fifteen years of age. In Maine there were about fortyfive thousand, in 1830, between fifteen and twenty years old, and less than fifteen hundred in all the academies in the State. In New Hampshire there are about thirty thousand of the same age, and of these but fifteen hundred in the academies. Massachusetts furnishes sixtyseven thousand of the same age, about twelve thousand of whom are found in academies and high schools. A distinguished individual* in New York, has estimated the number who are found in academies at four thousand, while there are more than two hundred thousand youth in the State, who are between sixteen and twenty years old.

Such is the condition of some of the States *best* furnished with schools. What then shall we say of other States? It was related in 1830, that but one hundred and fifty thousand children were found in all the schools of Pennsylvania, while the number who ought to have been in them, was more than

* B. F. Butler, Esq.

four hundred thousand, without including those who are more than fifteen years old. In Kentucky, by statistics, published by President PEERS, in 1831, it is shown, that one hundred and seven thousand, out of one hundred and thirtythree thousand children, are not furnished with any school whatever. Even these States are better furnished with schools than others which might be mentioned. Many of the schools which are now in operation, scarcely deserve the name. An intelligent teacher, in Virginia, in a recent letter says — 'We called at a school, and found some fifty scholars, running about to play, and doing everything but study. An old lady sat at one end of the room writing. Her husband about fifty years of age, sat in the corner, learning a boy to read in words of one syllable; at the same time chewing a monstrous quid of tobacco, while his head remained covered with an old cocked hat. This is a sample of a majority of the schools around me.'

But I reserve additional facts for another place, and proceed to inquire, of those who think we have an adequate supply of teachers, where have these teachers been prepared for this important work? Where have they learned how to *train* the young mind? Where have they learned how to control the diversified group committed to their care? Where have they learned the necessary details in the art of teaching? How many of them can form a close estimate of character, and with discriminating skill accommodate their instructions to the necessities of the scholars placed under their charge? I need not wait for an answer, from any one who has been engaged in searching for schools where the moral, intellectual and physical powers of children are harmoniously and judiciously trained. Do not the larger part of those who are employed as educators and teachers, frankly confess their ignorance of many departments of their duty? But is this true of a large proportion of those who are in the profession of law or medicine? What proportion of those employed as instructors have made the world acquainted with their opinions, in detail?

But is it true that those in other professions have been equally distrustful of their ability to teach others the mysteries of their professions?

It is by no means strange, that when the facilities for educating teachers are so imperfect, they are not possessed of higher qualifications, and that schools generally are not more elevated in their character. How could it be otherwise? Is it not rather a wonder, that so many teachers have arrived at so much eminence in their business, as some unquestionably have, and that we are able to specify any schools as models of what *all* should be?

If district schools generally, in the present state of things, *must* be furnished with inadequate instructors, it is less surprising that patronage has been more liberally bestowed on high schools and academies, than it has on these primary fountains of knowledge. But is it right that the patronage of the wealthy, and of government, should be lavished on schools, accessible to a few only, while those are neglected, on which seven eighths of our whole population are to depend for the means of education. Is such a course safe * in a

* Since these remarks were made, before the American Institute, I have read with deep interest, an article in the Christian Examiner, supposed to have been written by one of the most intelligent friends of education in Boston, a few paragraphs of which I beg leave to introduce in this place. The writer remarks: — 'One of the discouraging views of society at the present moment is, that while much is said of education, hardly any seem to feel the necessity of securing to it the best minds in the community, and of securing them at any price. A juster estimate of this office begins to be made in our great cities; but generally it seems to be thought, that any body may become a teacher. The most moderate ability is thought to be competent to the most important profession in society. Strange, too, as it may seem, on this point parents incline to be economical. They who squander thousands on dress, furniture, amusements, think it hard to pay comparatively small sums to the instructer; and through this ruinous economy, and this ignorance of the dignity of a teacher's vocation, they rob their children of aid, for which the treasures of worlds can afford no compensation.

country, where the *people* rule? Can it be justified on any principle?

Do I hear the inquiry, what shall be done, to remedy evils so common, so portentous, so shameful?

There is no office higher than that of a teacher of youth, for there is nothing on earth so precious as the mind, soul and character of the child. No office should be regarded with greater respect. The first minds in the community should be encouraged to assume it. Parents should do all but impoverish themselves, to induce such to beeome the guardians and guides of their children. To this good all their show and luxury should be sacrificed. Here they should be lavish, while they straighten themselves in everything else. They should wear the cheapest clothes, live on the plainest food, if they can in no other way secure to their families the best instruction. They should have no anxiety to accumulate property for their children, provided they can place them under influences, which will awaken their faculties, inspire them with pure and high principles, and fit them to bear a manly, useful, and honorable part in the world. No language can express the cruelty or folly of that economy, which, to leave a fortune to a child, starves his intellect, impoverishes his heart. There should be no economy in education. Money should never be weighed against the soul of a child. It should be poured out like water, for the child's intellectual and moral life.

Parents should seek an educator for the young of their families, who will become to them a hearty and efficient friend, counsellor, coadjutor, in their work. If their circumstances will allow it, they should so limit the school, that the instructor may know intimately every child, may become the friend of each, and may converse frequently with them in regard to each. He should be worthy of their confidence, should find their doors always open, should be among their most welcome guests, and should study with them the discipline which the peculiarities of each pupil may require. He should give the parents warning of the least obliquity of mind which he discovers at school, should receive in return their suggestions as to the injudiciousness of his own methods in regard to one and another child, and should concert with them the means of arresting every evil at its first manifestation. Such is the teacher we need, and his value cannot be paid in gold. A man of distinguished ability and virtue, whose mind should be concentrated in the work of training as many children as he can thoroughly understand and guide, would shed a light on the path of parents for which they often sigh, and would give an impulse to the young, little comprehended under our present modes of teaching. No profession should receive so liberal remuneration. We need not say how far the community fall short of this estimate of the teacher's office. Very many send their children to school, and seldom or never see the instructor, who is operating daily and

What shall be done? Why, just what is done to remedy the evils and consequences of quackery and ignorance on every other subject. EDUCATE men for the business of teaching, *employ* and *pay them when educated.* The evil is not beyond remedy, is not either too *obstinate* or extensive to admit of cure. One thing only is wanting, and that is within the reach of the community. It is thought to be miserable economy to commit the life and health of a sick child to the care of a mere pretender in medicine? Is it still greater folly to encourage a pettifogging lawyer or an ignorant, uneducated minister? And is the proof less clear that the labors of a quack pedagogue are if possible more hurtful in their influence?

Do I hear again the inquiry what should be done? I reply

deeply on their minds and characters. With a blind confidence, perhaps they do not ask how that work is advancing, on which the dearest interests of the family depend. Perhaps they put the children under the daily control of one, with whom they do not care to associate. Perhaps, were they told what they ought to pay for teaching, they would stare as if a project for robbing them were on foot, or would suspect the sanity of the friend, who should cause them to throw away so much money in purchasing that cheapest of all articles, that drug in every market, instruction for their children.

We know not how society can be aided more than by the formation of a body of well and efficient educators. We know not any class which would contribute so much to the stability of the state and to domestic happiness. Much as we respect the ministry of the gospel, we believe it must yield in importance to the office of training the young. In truth, the ministry now accomplishes little, for want of that early intellectual and moral discipline, by which alone a community can be prepared to distinguish truth from falsehood, to comprehend the instructions of the pulpit, to receive higher and broader views of duty, and to apply general principles to the diversified details of life. A body of cultivated men, devoted, with their whole hearts, to the improvement of education, and to the most effectual training of the young, would work a fundamental revolution in society. They would leaven the community with principles. Their influence would penetrate our families. Our domestic discipline would no longer be left to accident and impulse. What parent has not felt the need of this aid, has not been depressed, heart sick, under the consciousness of ignorance in the great work of swaying the youthful mind.'

GIVE TEACHERS A PROFESSIONAL EDUCATION. Proclaim to our country in a voice which shall reach from Maine to Georgia, and echo beyond the Alleganies, and the Rocky Mountains, the shame of neglecting to provide the means for this. Let the *truth* be told till it shall tingle in the ear of every one, who has a particle of patriotism, and philanthropy, that even here in this proud republic (which must stand, if it stand at all, by the intelligence and virtue of the people), scarcely the outlines of a professional course of instruction for teachers, have yet been drawn; still less have seminaries for the communicating of such instruction been established among us. In Prussia *thirty seminaries* for teachers are in successful opperation, furnishing six or eight hundred teachers annually, as thoroughly qualified for their work as those designed for the bar or pulpit. The whole number of teachers in Prussia, has been stated at from twenty to thirty thousand, of whom, seven hundred and fifty are annually supplied by seminaries, public and private, while eight hundred and forty only is the annual demand for new teachers. The deficiency for that whole country being less, annually, than one hundred well educated teachers. To each of these seminaries, is appended a model school. Contrast this with the provisions made in this country for the same objects.

New York, has indeed, a school sustained by an individual at an expense of three thousand dollars a year, where a thorough course of training, preparatory to teaching a few of the higher branches of science, is enjoyed.

In Massachusetts, two or three schools devote particular attention to the qualifications of teachers, — but yet in connection with a *general school* for the common purposes of education; and when this is told, nearly all is told which can be. A few colleges, indeed, have a brief course of lectures devoted to the subject of teaching, for the benefit of those who resort to this employment for a part of the time they are

connected with college. And one or two teacher's seminaries are projected in the great valley of the West. In the United States, we *need* an annual supply of more than four housand teachers,* besides those required for common schools, and there are the means of furnishing this supply! And allowing fifty scholars to one teacher, twentyeight thousand are at this moment needed to supply the existing deficiency, and furnish instructers to those over ten years of age, who are destitute ofall school instruction.

Will any one still assert that the apathy on the subject of a supply is not so alarming as statistics seem to imply, and that the rising generation enjoy better means for education than the youth of any other country? So far as New England is concerned, I admit it. But if the whole country is surveyed I deny it. Too long have patriots and christians been deceived on this point. Investigations which have been going on for the year past, have most fully convinced me that a part of the apathy I censure, is to be ascribed to ignorance of the real destitution which exists. A gentleman writing from Indiana, observes,—'On my right hand is a neighborhood containing sixty scholars, five of whom only know their alphabet. On my left, another containing about the same number, where the ignorance is still greater, and this is not the darkest part of the picture — hardly darker than many whole counties.'

I know a teacher, says another, who, to obtain employment, carried a subscription paper in one hand, and a jug of whiskey in the other, through the neighborhood, in order to secure patronage, and this in Ohio, the New England of the West! A correspondent in Georgia, states, that half the teachers of children there, would not be trusted with pecuniary responsibility amounting to twenty dollars, as many of them are intemperate.

* See valuable articles, by Rev Mr Woodbridge in the Annals of Education for July, Aug. and Sept. 1833.

A highly respectable president of a College in Kentucky, has stated in my hearing, that many teachers within his knowledge are intemperate men, and that probably more than three-fourths of the children in that state, are not supplied with teachers of any description. One county containing five hundred and thirtythree children, is not furnished with a single school. Other parts of the state and of the great valley of the West, are in an equally deplorable condition.

It has been said by opponents to the principles I advocate, that, educate as many men for teachers as you please, still they will not be employed.

If this were *true*, it would prove no more than this; that the friends of their country have two duties instead of *one* to perform, viz. to provide teachers, and then enlighten those who need their services, so that they may be employed.

But this objection has no foundation. Were there a thousand well qualified teachers, whose services might at this moment be commanded, I have abundant reason for saying, that they would be most earnestly sought for, gladly employed, and liberally paid.

Will an objector rise up and say, that educate men as thoroughly as you please, it is all in vain, for very few will become teachers of eminence. I have only to reply, this is bare assertion without facts to substantiate it. Where are the teachers professionally educated, in order to make the experiment? And let me ask, may not the same objection with equal force, be urged against educating men for the practice of physic, or for the bar or the pulpit?

Shall I be told, all that is necessary to qualify the *teacher*, is, to make him familiar with the branches of *science* which he is expected to teach?

I may be allowed to disbelieve this, while the conviction, that it requires an apprenticeship of seven years, to fit a per-

son to become a skilful shoemaker, carpenter, tailor, merchant or painter, is so universal.

Just as well might every youth, who has received the honors of college, claim the confidence of a community, in his skill as a physician or surgeon, while he has nothing but the knowledge which entitles him to a degree. Better, might the aspirant to holy orders, present his claims to ordination, as soon as he leaves the halls of college.

To train and educate the young mind, often requires more skill in intellectual and moral philosophy, more knowledge of human nature, indeed more common sense and acquaintance with character, than any other professional employment. Who will venture to assert, that the education of the *mind*, requiring as it does such a perfect acquaintance with its operations and developments, is less difficult or demands less *professional* training than the study of law, or medicine? less even than the art of the mechanic or merchant?

Will it be said that the community are not *able* to provide the means for educating teachers? *Not able?* How then are we able to indulge in the thousand extravagances of life? How are we able to spend millions on rail roads and canals, if *unable* to provide the means for rendering our children safe and happy while at school? We are *able*, more than able.

Will it be said that if means *are* furnished for educating teachers, few can be found to devote themselves to the labors and trials of this profession. I answer, it is altogether too soon to make such an assertion. Let the evidence which the experience of the past furnishes be examined, and *some* proof at least, is furnished that an adequate supply of young men are waiting for, and would gladly improve, an opportunity to educate themselves for the work. I speak not unadvisedly when I say, that hundreds are at this moment waiting to improve the opportunity to qualify themselves for the laborious work of the instructer. And are not thousands and tens of

thousands now wanted? While one clergyman, one lawyer and one physician, may supply the wants of a thousand inhabitants, a community of this size requires at least six teachers, allowing each one forty or fifty pupils.

Almost every state is provided with professional seminaries for law, medicine and divinity; but, alas! though double the number is required for the preparation of teachers, these are not provided.

I regret to say, that recent protracted illness and my present feeble health, compel me to leave the subject when I have but just entered upon it. May I not, under these circumstances, hope that others, who have surveyed it and contemplated its importance, will pursue it, till the whole community shall no longer slumber over it?

LECTURE IX.

ON THE

ADAPTATION

OF

INTELLECTUAL PHILOSOPHY

TO

INSTRUCTION.

BY

ABIJAH R. BAKER.

ADAPTATION OF

INTELLECTUAL PHILOSOPHY

TO

INSTRUCTION.

If, instead of this symmetrical and magnificent edifice, we had assembled in a building, every part of which discovered the utmost disregard to convenience, proportion, taste and elegance, what had been our convictions respecting its artificers? We must have thought them infatuated; or, at least, very unskilful workmen. The very sight of their building had probably excited, at first, an emotion of the ludicrous, then, one of pity, or even of contempt. We should ultimately have pointed at it as a beacon to warn others never to undertake the construction of a building, without a thorough knowledge of the nature of the materials and of the laws and principles of their appropriate combination. An educator is an artificer of the very highest and noblest order; and often the productions of his art are distinguished for disproportion and disorder. How often do we find a strong and capacious memory where reason and judgment are weak; or a bold and vigorous imagination, where there is little power of continuous and concentrated thought! How many seem to have cultivated one or two faculties to the neglect or at the expense of every other. Persons of this description are to be found in the private walks of life, in the social circle, in the common school and in the higher institution. In this age when a desire for novelty seems

to be levelling those standards of excellence, which the genius of bye-gone ages has reared; when flaming passion, intoxicated imagination, and fancy, already drunk with the blood of her slain, seem resolutely bent on the complete subjection, the unconditional surrender of reason, it certainly becomes us to inquire why a well-balanced mind is so seldom to be found? The existence of such inequality and disproportion in the development and cultivation of the intellectual faculties, is principally chargeable to the conductors of education. They have not understood, as they ought, the nature of that curious material, on which they have been operating. They have not suitably realized the vast importance of preserving a proper balance between all the intellectual faculties, so that these might grow together to a full and perfect stature. The only adequate cause of the phenomena from which these conclusions are derived, is found in a want, on the part of the educator, of a suitable knowledge of mind. Had he been a practical metaphysician; that is, had he possessed and applied a suitable knowledge of Intellectual Philosophy to the business of his profession, would these phenomena ever have existed? If not, then we learn the importance of the subject now before us,—'*The adaptation of Intellectual Philosophy to* INSTRUCTION.'

Before we enter upon the discussion of this subject, however, we must define, as definitely as possible, the term Intellectual Philosophy. Let it be premised, then, that by this term we do not mean the abstract metaphysics of the schools, or even of modern times. For what possible connexion can there be between our profession, the noblest and the sublimest of all professions, and such abstract inquiries, as whether the essence of the mind is distinct from its existence? Whether its essence, therefore, may subsist, where it has no actual existence? And what are all the qualities inherent in it as a nonentity? These and other kindred inquiries may gratify the abstract philosopher of modern times. They

might please the vain curiosity of the mystic, who loved, in a darker age, to wander in darkness visible in search of what he knew not. But to him, who would superintend the education of youth in this enlightened period, they can afford no rational gratification, no ability for a better discharge of duty. While, therefore, we turn with marked detestation from the pursuit of such philosophy, let us not with it reject that practical philosophy of the human mind, on which the art of education depends. For in the beautiful language of Seneca, 'it sits at the helm, and in a sea of peril, directs the course of those who are wandering through the waves.' When we speak of the adaptation of Intellectual Philosophy to education, let us be understood to refer not to abstract and theoretic speculations, but to that science of the human mind which investigates its phenomena, and applies the results of investigation to the practical purposes of active life.

The intimate relation between this practical philosophy of the human mind, and the art of education, may be argued, *in the first place, from the nature of the truths, with which this science makes us acquainted, and the ultimate object of education.*

What, then, is the highest object of education? To this we may reply negatively, that it is not the mere communication of instruction. For were it possible for one, by the use of the steam-engine or some other labor-saving machine, to bring within his reach the whole compass of human learning, so simplified and yet so compressed, as to be grasped without long, patient, and sometimes even painful exertion, he would thereby be no better, possibly, not even as well qualified for the exertions of active life. Such a literary Polyphemus, without mental discipline, would be to the world no better than a mere ignoramus. Obvious as this may appear, still, in the hour of feverish excitement, when the prospect of a splendid display of learning fills the teacher's eye, and the solicitations of pa-

rents and pupils, ambitious of applause, are whispered in his ear, he often disregards the convictions of his own more enlightened reason and reflection, and hence, gives that the precedence which ought ever to hold a subordinate rank.

These remarks are not intended to depreciate the importance of great intellectual attainments, but only to remind us of what ought never to be forgotten, that the mere communication of instruction does not constitute the sublimest object of education.

We should naturally suppose there could be little danger that a truth, so obvious and yet so important, would ever cease to exert its appropriate influence; especially, since it is so nearly allied to the principles that guide us in the most common operations of life. You may put into a house furniture to a sufficient amount, but if there be far more articles of one kind and far less of another than are requisite, the house will not be well-furnished. Or if there be a sufficient amount of the different kinds of furniture, and the whole be arranged without regard to order, convenience and taste, it will not subserve the purposes for which it was originally designed. Nor will it answer this design, if its arrangement be ever so perfect, in a house constructed without regard to the same principles, till the house itself be altered; perhaps not, till it be razed from its foundation and rebuilt. So it is with great intellectual attainments, made with little or no regard to proportion and order of arrangement. But if their proportion and order of arrangement could be ever so perfectly adapted to the wants of life, still what would they avail without the most symmetrical development of all the faculties! They could merely render their possessor a bookworm, so snugly packed between large folios that he could neither eat, nor distribute of his abundance to others.

By this illustration, we are prepared to reply affirmatively, that the leading object of education consists in such a devel-

opment of all the physical, intellectual and moral faculties of man as shall prepare him for the most efficient and benevolent action. Any object less elevated than this, is unworthy of the age in which we live — unworthy of the high destiny of those for whom, and those upon whom we act, — unworthy of ourselves. How now is this object to be secured? It can be secured only by the action of mind upon mind. This action may be direct; as when the teacher communicates instruction by familiar conversation or lectures; or it may be indirect, as when he teaches his pupils by means of text books and other external apparatus. But, in either case, he should understand the laws of mental action. He should know that the mind, forming in itself one indivisible whole, may exist in different states denominated faculties. He should know the modes of development peculiar to each of these faculties; by what means they are to be recovered from those aberrations to which they are occasionally subjected; and how he can preserve to them that healthy and vigorous tone of action, which forms the brightest ornament of a well-balanced mind. He should be master of those rules by which the changes and revolutions in the empire of thought and feeling are produced. Nay, he should enter into the Penetralia of the soul, and there discover the principles from which these rules are derived. Without some knowledge of these truths, the teacher can no more expect to attain the great end and object of education, than the blind can expect to make discoveries in Optics, or the deaf, in Acoustics. But these are only some of the more prominent truths of intellectual philosophy. Yet these are sufficient to show, that this science, when viewed in relation to education, constitutes the very foundation upon which that art must forever rest. He, therefore, who is destitute of a knowledge of this science, wants an essential requisite of a good teacher.

But, secondly, the importance of this knowledge, or the

intimate connection between this science, and the art of education, may be farther shown *from the success of some teachers who are not remarkable for great scientific attainments, and from the failure of others, who are.* Under the first of these classes, I include such as may be styled '*self-taught*' teachers; such as have never enjoyed the advantages of a regular Academic and Collegiate education; and have, perhaps, never studied any particular treatise on Intellectual Philosophy; but who have still long been critical observers of the phenomena of their own and of others' minds; who have classified these phenomena according to their felt relations; and who have hence deduced the most important practical principles. How often it is said of such teachers that their greatest excellence consists in their *wonderful faculty to govern.* To govern what? Evidently those thoughts and feelings of their pupils which are subject to laws more invariable than those of the Medes and Persians. Their ability to govern, results from their knowledge of these laws, and we have just seen how that knowledge was derived. This ability, therefore, upon which the secret of their success depends, is, in the highest and noblest sense of the term, acquired; for it consists of their knowledge of practical metaphysics directing the art of education.

Of course, a want of this knowledge, applied to the same noble purpose, discovers the true reason, why so many, even among the learned, fail, absolutely and entirely fail, in the business of instruction. They have sufficient book-knowledge; it may be even of Intellectual Philosophy. They may have spent much time in searching into the sublime mysteries of this science. But then they have been looking for its truths without, whereas they are within, and only require to be brought out and applied to the practical purposes of life. This, they have never done. They have not studied this science, as every teacher ought, with particular reference to in-

struction. They have not studied it, as it is in truth, one of the most practical, and, of course, one of the most useful of all the sciences.

If, now, the limits of this discussion would permit us to appeal to history, we should find an additional proof of the intimate connection between this science, and the art of education. Could we call upon that reverend chronicle of the past to tell us in what periods of the world, the art of education has advanced with most rapid strides, we should find them to be the very periods in which the study of Intellectual Philosophy has been most practically and most zealously prosecuted. But we need not take this circuitous course, when there is abundant confirmation of the same sentiment within and around us.

This leads me to remark, *in the third place, that school committees, boards of trustees and other guardians of education, in practice, recognize the principle for which we now contend.* When they wish to employ a teacher, they do not inquire simply respecting the amount of his acquired knowledge, but also respecting his ability to govern mind and to communicate instruction, [redacted] an ability [redacted], which, as we have seen, is, in the highest sense of the term, acquired. But if this be an acquired ability, and if it be, in the estimation of the guardians of education, an indispensable requisite in a teacher, it may be asked, why the guardians of education do not make it a subject of critical examination? When they are satisfied that the candidate possesses the requisite amount of acquired learning in other respects, why do they not examine him as to his ability to govern, and as to his mode of communicating instruction? Suppose that a committee in conducting such an examination of a teacher, should ask him such questions as the following: How would you secure the affection and the confidence of your pupils? How would you induce them to love and to endeavor to render each other

happy? Should they ever indulge such passions as anger, revenge and the like, how would you suppress these malevolent affections? Should they, by continued indulgence of these, render some punishment necessary, what kind would you inflict? How would you inflict it? How would you awaken and sustain an unabating ardor in the prosecution of any given study, as that of arithmetic, for example, in the mind of a scholar every way disinclined to it? How would you most successfully teach him to remember what he learns? How would you teach him to apply his acquired learning to the purposes of active life? Why would you take the course which you have now suggested in each of these cases? By such questions, an examining committee might put the teacher's ability to govern his school and to communicate instruction to as fair and as honorable a test, as that to which they now subject his other qualifications. If, then, they are able to ascertain, whether the teacher possesses this ability, why do they leave it to be tested by a doubtful experiment? Why, surely, since if it be not possessed, they lay themselves under the necessity either of dismissing their teacher in violation of their contract, or of suffering him to continue at the sacrifice of the cause with which they have been entrusted? Why is this most important part of their duty neglected, when the consistency of their characters and their love for their children and for their common country urge them to its performance? Whatever may be the cause of this neglect, it is still manifest that they acknowledge the importance of the ability of which we now speak. Suppose a committee have examined a teacher in the ordinary way, and have suffered him to commence his school. They soon receive a complaint from one of the patrons, that his boy has been unnecessarily and severely punished. Complaint follows complaint, till the committee determine to examine the school for themselves. They find it in the utmost disorder and con-

fusion. What committee, under such circumstances, would hesitate to say to the teacher, ' you must leave the school?' But *why?* Merely because he does not possess an ability which was not required by the statute, and which was not perhaps even contemplated in the terms of the contract. This ability, we have seen, is to be derived from the study of practical metaphysics. By such conduct, on the part of the guardians of education, they clearly evince the importance which they attach to this science.

But the connection between this science and the art of education will appear still more intimate, *if, in the fourth place, we consider the important aid which a thorough knowledge of practical metaphysics, will render to the teacher in the faithful discharge of his duties.*

First. Let it be remarked, then, that a practical knowledge of metaphysics will assist the teacher readily to discover the real intellectual wants of his pupils. These wants must be discovered, before they can be supplied. They will vary with age and acquired habit. The appropriate business of infancy and childhood, is to train the external senses, to prepare these inlets of knowledge for nice discrimination, for the acquisition of definite perceptions. This is evident from that irrepressible desire for action, and that fondness for external objects, which characterize these early periods, — a desire and a fondness which a benevolent God designed for higher and nobler purposes, than merely to increase the care and vigilance of the parent. It was evidently intended for rational gratification. But the partiality of the nursling for sensible illustration will lead to excessive indulgence, unless it be restrained by the circumspection of the teacher. A constant and protracted use of blocks, marbles, pictures and other sensible objects, will unavoidably produce imbecility of mind, a result of which there have been many lamentable illustrations. In this way pupils have gained the impression that they must be

excited and pleased in order to learn; that their attention must be fixed by some sensible object; and that their memory must be aided by its presence. These unhappy effects result from the abuse of what is in itself desirable and necessary. Had the teacher understood that the real design of such illustrations, is only to afford his pupils the assistance, which the chair furnishes him that is beginning to walk; had he possessed such a knowledge of Intellectual Philosophy as would have enabled him to fix the time, and manner, appropriate for advancing his pupils from a sensible to a more purely intellectual mode of instruction, these unhappy effects had never existed. Think now of the stubbornness of early habit, of the depth of early impression, and then say, whether this knowledge be not inconceivably important to him, or to her, who takes the child from the nurse's arms, and trains it in the Infant School.

But its instrumentality is not less desirable and necessary in revealing the wants of pupils, in the more advanced stages of education. For there will often be bad intellectual habits to correct, and improper impressions to erase. How now shall the teacher become acquainted with these habits, and, of course, with the real wants of his pupils? This cannot be done by such examinations as are usual upon the admission of new scholars to school. The design of such examinations is only to ascertain the amount of acquired knowledge. But they do not accomplish even this object; for no just estimate of real intellectual attainments can be made by a few isolated questions and affrighted answers. But this object, if attained, would do little or nothing towards disclosing the actual state of the pupil's mind. By such examinations the teacher only surveys the exterior of his pupils; he does not look within their minds. How unlike this, is the conduct of the teacher in the common transactions of life! Is he to hire or purchase a house, ready furnished for a distant

friend, a parent, it may be, of the pupil he has just examined? He will not venture to do it upon a slight inspection of the exterior. No, not even if every article of furniture in it is brought out and exhibited. He must enter every private chamber, and examine every closet, before he can determine, whether it will answer the demands of his friend. Why now, in the examination of his friend's favorite boy, does he not enter into the private chambers of his soul, and see what alterations must be made in the mind of this darling son, before he can answer the great end of his intellectual and rational being?

To illustrate the manner in which this should be done, let us suppose that several young pupils are to enter a school. The teacher wishes to ascertain the natural power and the acquired habits of *their external senses*. He begins with the sense of taste. Here permit me to copy from the examination of some young masters. The teacher, asks them 'What is the sweetest object of which you ever tasted?' They unitedly reply, '*honey*.' 'What is another very sweet object?' '*molasses*.' The teacher then directs them to spell the names of as many sweet objects as they can, while he writes them in a column under the quality, *sweet*. If any one mentions the name of an object that is not sweet, or makes a mistake in spelling, the others are to correct him. The pupils proceed and mention the names of the following sweet objects; '*honey, sugar, molasses, juice*.' Here one little boy exclaims, 'some juices are bitter, as that of the wormwood.' 'Others,' says another, 'are sour, as that of the lemon.' But, says the first, 'juices are sometimes sweet, as that of the maple.' 'How, then,' says the teacher, 'will you modify your expression?' 'I will say *some* juices are sweet.' 'Very well,' replies the teacher. 'Proceed.' '*Some apples, pears, peaches, rareripes, pine-apples, whortleberries, raisins, figs, dates, oranges, plumbs*.' 'He does not spell it right,

cries one. 'It is spelt, *p-l-u-m-s.*' Here for want of time the teacher terminates this list.

He now proceeds to point out the characteristics of this quality in these different objects. He inquires, 'are these objects equally sweet?' The pupils reply, 'they are not.' 'Sweetness, then, may exist in different degrees.' Here he requires the pupils to review the list, and to arrange the names of the objects according to the degree of sweetness. The pupils all agree that honey shall take the lead in this new list. Some think that sugar; others, that molasses should be placed next. Thus the indistinctness of their external perceptions occasions much discussion. At length, however, the list is nearly completed. Still, there are a few objects which they cannot now arrange. These are set aside for future examination. The teacher and the pupils now *re*-review the first list in order to derive from it a new one, in which the different species, included in these generic expressions, are to be arranged upon the same principle. Here the different kinds of honey, sugar, plums, &c, are all arranged according to their degree of sweetness. Thus the teacher proceeds from the more to the less obvious distinctions, until he has thoroughly examined the sense and perceptions of taste. In a similar manner he examines each of the other senses, and their perceptions. The mode of examination must, of course, vary with the age and the capacity of the pupils. As the result of such an examination the teacher will ascertain the power of the senses, and the character of the external perceptions; in other words, he will, in these respects, discover the wants of his pupils. By the same process, varied according to these wants, he will be able ultimately to supply them. Of this, however, we shall speak hereafter.

When the teacher has thus surveyed the exterior of his pupils, he is prepared to enter the more private sanctuary of their souls. Here he wishes first, perhaps, to try the power of

attention. He takes a book and reads, or he relates some story or some event in history suited to their age and capacity. Some appear to catch every word, 'e'er from his opening lips it breaks;' while others soon begin to gaze about the room, and only, now and then, hear a word or sentence. After repeating and varying this process like the preceding, can the teacher hesitate to decide which of his pupils has the power of continuous and concentrated thought?

Next the teacher wishes to ascertain the strength of the associating principle, or the readiness of suggestion. With a view to suggestion by resemblance, he inquires, 'What animal most nearly resembles an ape? a sheep? a dog? a cat? What fruit resembles an apple? a peach? a currant? a cucumber?' He next inquires for the points of resemblance; as, 'in what respects is a man like an ape? a goat like a sheep?' &c. On the principle of contrast he inquires, 'What is the opposite of great? rough? long? kind? mountain? anger? pride? life? heaven?' Here also the pupil is required to point out in what the opposition consists. On the principle of cause and effect, the teacher inquires, 'What makes the grass grow? The smoke ascend? What produces night? ice? motion? What are the effects of fire? wind? volcanoes? of the deluge? of anger? industry? drunkenness?' On the principiple of contiguity in time and place, he inquires, 'What are the towns, counties and states contiguous to that in which you live? To Quebec? To Bennington? To Boston? To Philadelphia? What important and interesting objects are there in or near any of these towns? When were these towns settled? What other towns were settled, or what events happened, about the same time? Were these before or after the declaration of Independence? How long before or after that declaration? What war followed this declaration? Will you relate anything which you recollect about the origin, progress and termination of that war?' Here, one will follow the order of date,

and give a minute answer to every part of this complex question; while another can mention only a few prominent and detached facts. In this way the teacher will ascertain the power of suggestion and memory.

By a similar process the teacher may ascertain the strength of the faculties of invention, reason and judgment. By thus experimenting upon the minds of his pupils, he may as readily ascertain the actual state and the comparative strength of each faculty, as the chemist can determine the power of galvanism, or of steam. But when he has acquired this knowledge, will he not know, not only what are the attainments of his pupils, but also what is requisite for each intellectual faculty?

But if the instrumentality of this science terminated here, it would leave the teacher as miserable, as must be the philanthropist with a distinct and perfect view of the sufferings of his fellow men, without the ability of affording relief.

This leads me to remark, secondly, that a practical knowledge of Intellectual Philosophy, will assist the teacher in the selection of such studies as will, if properly prosecuted, supply these wants.

Does it enable him to discover in his pupils an entire want of interest in everything like study? It also teaches him how to arouse the latent energies of the soul; how to awaken an interest in the pursuit of learning, which shall sustain the pupil in long and patient investigation, which shall enable him to surmount every obstacle, and, with unabating ardor, to press onward to the attainment of his object.

The disinclination of some minds for study, the inactivity and inattention of others, have induced some to believe, that laziness and inertia constitute the primary law of our intellectual being. But the disquietude and misery, consequent upon vacuity of thought and want of occupation, cannot fail, when duly considered, to convince us that action is the first principle of man. Benevolent, vigorous and powerful action is the source

of his highest happiness. How strong is the desire for incessant action in those early periods of life, in which education is to be principally acquired! With this incessant activity both of body and mind in children, who has not noticed with admiring gratitude their *curiosity* to know? Who has not sometimes had his own learning and wisdom tasked in attempting to give appropriate answers to their endless inquiries? These inquiries are only a development of their curiosity to learn, — a curiosity which a benevolent God has created, and which the teacher is only to transfer and sustain, by presenting, in an appropriate manner, suitable objects for study.

Let us see how this is to be done. Maria, a little girl, devoid of interest in study, is to enter a school. The teacher soon discovers that her chief desire is to walk over the fields, and collect the wild flowers. He permits her to gratify this desire. She soon returns with as many flowers as she can bring. He now requires her to sort them. This, after some hesitation, she does according to their different colors. The teacher now calls from the school another little girl of nearly the same age, whose name is Juletta, and requires her to tell Maria all she can about her flowers. At first she is surprised at Maria's classification. She shows her how imperfect it is. She then takes the flowers, analyzes and reduces them, by a scientific arrangement, to their appropriate classes, orders, genera and species. Maria is surprised, and yet delighted. For Juletta has been all the while relating to her many highly interesting and important facts respecting the history and utility of each of her flowers. Just as she is terminating her classification, she discovers one flower which she dare not touch. She says to Maria, 'how dare you gather it? It is a rank poison. Let me see your hands. O how red and inflamed! Do they not pain you.' 'They do,' says Maria, 'begin to feel unpleasantly.' Full of fright they haste to their boarding house, and relate the sad story to their hostess. She

bathes the hands, and the inflammation, at length, subsides. The teacher, in the mean time, calls to comfort his afflicted pupil. He converses with her about the lesson which this sad accident has taught her, shewing her that had she studied Botany attentively, before she went out to collect her flowers, she would have avoided all this trouble and pain. As he is leaving the room, Maria inquires, 'may I study Botany?' Says the teacher, 'I should be very happy to have you, but I fear you will not be able to understand it, until you have first studied more perfectly some other branches. However, you may try.' He sends her a Botany. Maria finds in it many hard names; in the historical part, many figures and dates which she cannot understand. She returns her book, and inquires for those preparatory studies of which her teacher spake. He directs her to attend to reading, spelling and arithmetic, the very studies of which she felt the need in reading her Botany. She now prosecutes these studies with an interest more intense even, than was, at first, her desire to gather flowers.

This, though it may not always be attended with so much pain, is but an epitome of what every teacher must do in order to transfer and augment the interest of his pupils in their studies. If now we analyze this process, we shall see that it depended entirely upon the teacher's knowledge of mind. This enabled him to discover the object, in which the pupil was most deeply interested. It discovered to him the causes of the various changes which the mind must undergo in order to transfer this interest, augmented by each change, to the most suitable studies. Without infringing a single right of freedom, it makes the teacher sovereign of his pupil's mind.

Does it discover to him an indistinctness in their external perceptions? It also teaches him how these senses are to be so cultivated as to acquire the most definite perceptions. To the inductive, the only proper method for their cultivation we have already alluded.

Does it discover to him a want of a habit of fixed attention, of concentrated thought, an ability, when the mind is roused to the highest pitch, of directing its combined powers to a single *point*, and there detaining them in action the most intense, an ability which seems to constitute *Genius* in the highest and noblest sense of that term? It also shows him by what means this ability is to be acquired. An interest in the object of study must co-exist with a desire for examination. We have already seen how this interest must be excited. The desire must be prompted in a similar manner. Then there must be a long and close application to the exact sciences. Previously, however, the pupil must be taught and made to feel, that he can attend to but '*one thing at a time.*' 'This cardinal truth,' says Mr Locke, 'will carry a man through anything;' a truth which *mere talk* can never teach. It must be impressed by experiment upon the tablet of the pupil's heart. The untutored mind must attempt to conduct at the same time two or more processes of thought, in each of which it is equally interested. The ungratified desire, rendered more intense by the presence of the object, and the pain, resulting from an attempt to grasp so much as to secure nothing, will so deeply impress this truth that it can never be erased. Need I now ask, whether this process will require the teacher to be a practical metaphysician?

But does the teacher wish to cultivate memory? This then will be an additional reason for the cultivation of attention; for close attention is a constituent of strong memory.

The other principal constituent is association. This may be cultivated by exercises of which the following are specimens.

'Of what figure does the letter O remind you?' 'Of a circle.' 'Why?' 'On account of its resemblance to a circle.' 'If then you wished to assist a little child to remember the form of this letter, with what would you tell him to associate it?' 'With that of a circle.' 'Is the resemblance between this letter, and a circle exact?' 'It is not.' 'Does the sight of one person some-

times remind you of another?' 'Yes.' 'Why?' 'Because they resemble each other.' 'Is the resemblance generally perfect?' 'It is not.' 'Of whom does the mention of the city of Washington remind you?' 'Of George Washington.' 'But what resemblance is there between the capital of the United States, and the hero of the revolution!' 'A resemblance in the sound of the terms by which they are designated.' 'If then you wished to teach a little child who had heard many pleasing stories about President Washington, to remember the name of the capital of the United States, with what would you tell him to associate it?' 'With that of General Washington.' 'If then you wished to remember the name of a person whom you never saw before, with what would you associate it?' 'With that of a person or object having the same or a similar name.' 'If you never heard such a name before, would you be better able to remember it by tracing some resemblance of the person to some one of your acquaintance?' 'We should.' 'But suppose you neither see nor think of that stranger again for many years, would you then be likely readily to recal his name?' 'We should not.' 'Must, then, this association be strengthened by frequent reviews?' 'It must.'

In this way let the pupil become so familiar with the principles of association, that he will apply them as by intuition. He will then find little occasion to complain either of the weakness or the treachery of his memory.

But the cultivation of the associating principle should not terminate here. By critical analysis the pupil should learn to discover the principles of association on which transitions are made, and the parts of discourse associated together; that he may himself acquire the ability of giving direction to thought. A single example will illustrate the facility with which this ability may be acquired, and the importance of acquiring it.

At a party of twenty or thirty young persons, in a pleasant country village, soon after the commencement of President Jackson's administration, there was a young lady, who had

practised only a few weeks such familiar exercises as those to which we have just adverted. The aborigines of our country were the topic of conversation. She was full of apprehension, lest some incautious remark should be made, that would deeply wound the feelings of one member of the company, for whom she had a very high regard, and whom she well knew to be of Indian extraction. Politeness, therefore, required her to transfer the conversation to some other subject. She knew of none, that would excite more general interest, than a change which had just been made in the Post Masters of her native town. Now instead of remarking abruptly upon this change, she at first directs the conversation to the Indian hostilities; then, by contiguity in time, to the victory of General Jackson over the Creeks and the Cherokees; and, after dwelling a little upon the success of Jackson as a general, by resemblance, to his success as a candidate for the presidency; and, finally, by contiguity in time again, to some of the leading features of his administration, one of which evidently was the removal of a large number of subaltern officers, and among others, the Post Masters in her native town. Thus, without the least appearance of ostentation or even of design, she actually governed the conversation of the company, freed herself from painful apprehension, and her friend from much unhappy feeling.

Is not this acquired ability in the highest degree desirable and useful? Does it not give its possessor a power over the minds of his fellow-men, which might well excite the envy of an Alexander? Ought it not, then, in a course of education to receive a share of attention? But how can it, unless the teacher be a practical metaphysician?

Not less important to the teacher, will be the advantages of this science in the cultivation of the reason and judgment of his pupils. It will enable him safely to refer to them important questions for decision; because, by familiar discussion, he may lead them, as rational beings, to correct conclusions. He

will find frequent occasions for such discussions. Let us take, as an example, the following. During that portion of school hours, which is assigned for attention to business one of the pupils presents the following question to the teacher: '*Mr —— may we have to-morrow for a holyday?*' After reading the question aloud, the teacher remarks, 'O yes, I should myself be very glad to have to-morrow for a holyday. But, if we have it, and take a walk, a ride, or a sail, people will ask us, why we did not have our school as usual. We ought certainly to be able to give them a satisfactory answer. Unless we could give them such an answer, we could not be satisfied that we should do right to take to-morrow for a holyday, and unless we could be satisfied of this, we certainly could not enjoy the day. How many of you think that you could give a satisfactory answer to individuals who might ask you this question; or how many think it would be *right* to have to-morrow for a holyday?' As the pupils are very much divided in opinion on this question, the teacher defers any further consideration of it, till the hour for writing composition. When this hour arrives, he again reads the question, and then assigns one half the hour for writing, and the other half for reading, or presenting, in familiar discussion, reasons why to-morrow should, or why it should not, be a holyday. Every pupil takes one side or the other of this question, and occupies every moment of the first half hour in vigorous thought, in the invention and arrangement of arguments in support of his opinion. The second half hour is equally occupied in animated and eloquent discussion. After the question has been thoroughly debated by the pupils, and the teacher has subjoined his remarks, both on the discussion and the merits of the question, it is decided almost without a dissenting vote, that it would not be right to have to-morrow for a holyday. To say nothing of the paramount importance of such discussion, in the cultivation of a true and manly eloquence, its advantages, in the cultivation of

reason and judgment, are incalculable. But the teacher who is not a practical metaphysician, cannot expect to witness these advantages; for he will not have the ability to lead the minds of his pupils through the successive parts of such a discussion to the proper conclusion.

Equally important will be the advantages of Intellectual Philosophy, in the cultivation of imagination and all the other intellectual faculties. And what is still more desirable, this science will show the teacher how to enlarge the capacity of his pupil's minds. Or by what means he is to make a *little* mind a *great* one. It is the remark of a celebrated author, that 'the mind grows by stretching it.' The teacher then should find occasion every day to bring the attention of his pupils to some subject which shall put in requisition their utmost energy, which shall even task their largest capacity. Such are the subjects of the infinite divisibility of matter, the vast chain of being, the nature and many of the obligations of virtue; such are many subjects connected with Mathematics and Natural Philosophy; such the description of many parts of natural scenery, of many of the works of art, of the being and the perfections of God. This is sufficient to show how important it is, that the teacher should have such a knowledge of Intellectual Philosophy, as will enable him to make a selection of studies, which shall be suited to the actual state of each intellectual faculty.

Thirdly. It will be equally important in order to enable him to direct his pupils to a proper method of prosecuting their studies. Scholars do not generally know how to apply their powers in the best manner. The teacher, therefore, after he has learned the state of their education and of their intellectual faculties, and, with reference to these, has made a proper selection of studies, should show his pupils *how to study*. But instead of this, how common to admit the pupil to school, to assign him his studies, perhaps with little or no re-

gard to the comparative strength of his different faculties, and then to leave him to his own method of study. Let us suppose that his efforts commence, with geography. After some little explanation of what are, falsely called, '*first principles*,' he is presented with a map of the whole world. The first question in his lesson is, 'Where is Pekin?' He does not know whether to look for a town, a mountain or a river. He must, therefore, look simply for the name. But there are before him ten thousand names in every variety of type. He looks upon every part of his map, and, now and then, whispers to himself, 'I do not believe Pekin is on my map.' Perhaps, after some half hour of vexation, he finds it. And now lest he should forget its situation, while he is searching for the next place, which perhaps is Mount Elias, he puts his thumb upon it. As he advances, his difficulty in finding and remembering the situation of places, increases in the direct ratio of their number.

But let the teacher send the same pupil to a particular house in a neighboring town, directing him as to the way and the successive objects which will arrest his attention, and he will without difficulty go immediately to the house. Shall I now ask whence this difference? His success in the latter case can be attributed only to the directions which he received. Had the teacher given him as definite directions in the former, he had been equally successful. If, now, he send the pupil to the same place again, he need not give him directions as to the way. For the objects which guided him at first, are associated together by the principle of contiguity in place. If, therefore, he would aid the pupil's memory in the study of geography, he must teach him to apply the same principle. If in history, he must add to this the principle of contiguity in time; if in languages, then he must teach him to associate by nice analogies. It is not necessary that he should explain to his pupil the philosophy of these different modes of association, in

order to enable him to understand and practise them. All that is requisite can be taught by familiar exercises, in which there is no great array of learning, no exhibition of philosophy, falsely so called.

There is a right and a wrong method of prosecuting every study. They can be distinguished, the one chosen and the other rejected, only by a practical knowledge of the human mind. The same knowledge will show how futile, how absolutely vain, must be an attempt to apply the same method to every study. Alas, how often is this attempt made! One wishes to give universal application to the Socratic method; that by question and answer. Another is equally partial to the analytic method. A third, with a reckless independence, or a pedantic censure of all text-books, will have everything studied by subjects. A better knowledge of mental philosophy would teach such teachers, and surely they need to learn, that all these partialities for any particular method of study, which have not ultimately originated in a critical observation of the phenomena of mind, subvert, in proportion to their strength and degree of indulgence, the very object of study.

But the teacher has not yet found the richest reward of this science. For this he must look, when he meets his pupils in the recitation-room.

This leads me, finally, to consider the advantage of this study to the teacher in the communication of his own knowledge. The great apostle of the Gentiles enumerated an aptitude to communicate instruction among the essential requisites of him who would teach the sublime truths of Christianity. Are we, then, to regard the same qualification as less important to him who is to be the forerunner, the pioneer of the religious teacher? Reason answers, no. Observation too makes the same short, but pertinent reply. To what else than a different aptitude to communicate instruction, can we ascribe the different degrees of interest which men of equal erudition excite in

the recitation and the lecture room? The remark is often made respecting two of the most distinguished chemists in our country, that one will commence a course of lectures with two hundred, and terminate it with twenty hearers; while the other will commence a course with twenty, and terminate it with two hundred; and that, too, when superior attainment would give the first a decided advantage. Is it now asked to what this difference is to be attributed? The only reply that can be given, is, that it is owing solely to their different powers of communication. To the different degrees in which this power is possessed, must be attributed, more than to anything else, the different degrees of success, that attend teachers of equal attainments. For the want of this power in the teacher, no other good qualities can atone. Alas, for the want of it, how many fail! They take too much for granted. They soar above their pupils. They excite at first their admiration; then, their displeasure; and ultimately, their contempt.

If they would excite the interest, chain the attention, strengthen the memory, and leave *their mark* indelibly impressed upon the minds and the characters of their pupils, they must come down to the level of their capacity. Why, this important truth seems to be written upon the very face of nature! For when the dark and angry cloud has overspread the horizon, there is no streaming light from heaven to earth, or earth to heaven, till a line of connection is formed. Then the forked lightnings flash; then the muttering thunders roar. So it is with the mind of the teacher and that of the pupil. There must be a line of connection, an actual contact, a mutual and reciprocal action of mind upon mind, ere genius will flash or native talent speak. This is a result which he can never realize, who is ignorant of the very first principles of mental attraction and repulsion. One may as well lecture on electricity, without a knowledge of conductors, as he can communicate instruction who has no knowledge of Intellectual Philosophy.

Upon his knowledge of this science, will also depend the government of the teacher. For we have seen that an ability to govern, is nothing more than an ability to direct the mind according to those laws and principles which control its thoughts and feelings.

We see, therefore, some of the reasons why the teacher should be a practical metaphysician ; — because he will then be better able to govern — to communicate instruction — to direct his pupils to the best methods of prosecuting their studies — to interest them in the objects of study — to select for them such studies as their pursuits in life, their present amount of acquired knowledge, and the comparative strength of their intellectual faculties may require — and by a familiar and yet critical examination, it will enable him to ascertain what are the intellectual wants of his pupils. Without a knowledge of this science, he will not be able to meet the demands of the guardians of education, and of public sentiment. Without it, whatever may be the attainments of the teacher in other respects, he cannot reasonably expect success. Besides, the ultimate object of education can never be attained without a thorough knowledge of practical metaphysics.

If a knowledge of this science be so important, how is it to be acquired ? We believe, it cannot, be suitably acquired by observing the *bumps* on the head, nor by an exclusive study of text-books. The latter may aid in its acquisition, especially if studied with direct reference to instruction, and under the tuition or in connection with the lectures of an experienced teacher. But it must be acquired principally by the study of one's own mind, and by a critical observation of the minds of others.

Let not the difficulties which may attend the acquisition of this knowledge discourage from its attainment. For they are not worthy to be compared with the reward which shall be revealed, when they are overcome. No, not even with the motives which urge the teacher to surmount them. The pro-

gress of education and instruction require him to make this acquisition. Unless he make it, education can never become a regular science, and as much an object of study in our Academies, Colleges and Universities as that of chemistry or mathematics. Almost everything which has as yet been published on this subject consists either of a mere collection of facts, which have never been classified or reduced to a regular system, or of mere arbitrary rules, with little or no development of the principles from which they have been derived. And from the nature of the case, this must continue to be so, until the philosophy of teaching, or, what is the same thing, the application of practical metaphysics to instruction, be better understood. Till then, teaching cannot become a distinct profession. We may give it that name; but it will not have the substance. Till then, the world cannot be redeemed from darkness to light, and from ignorance to a knowledge of the gospel of truth.

LECTURE X.

ON THE

BEST MODE OF TEACHING

NATURAL PHILOSOPHY.

BY

BENJAMIN HALE.

NATURAL PHILOSOPHY.

Mr President and Gentlemen,

The circumstances, under which Natural Philosophy is studied in schools of different rank and character, differ so widely, that no one mode of teaching it can be pointed out as universally the best.

In common academies and schools of lower rank, the pupil brings to the study of the physical sciences, very little preparation, either in the way of mathematical knowledge, or intellectual discipline, — devotes very little time to it, and aims only at superficial attainments.

In colleges, on the other hand, and those higher schools, which are intended to give extensive and systematic instruction, the pupil is prepared, by previous training and acquirements, to study natural philosophy to advantage ; and he enters upon it with the purpose of giving it so much time and attention, as are necessary to make him master of its more important principles and details.

It is obvious, that, when both the means and ends in pursuing a study differ so greatly, modes of teaching must vary, and no one method can be spoken of as best, except in reference to the capacities of the pupil, whether natural or acquired, and the extent, to which his circumstances may permit or his purpose lead him to carry his studies.

In investigating, then, the subject, which you have done me

the honor to assign me, it will be necessary for me to have reference to these different circumstances of pupils, although it will appear, that there are certain partial methods, expedients to secure certain important objects, which are of universal application.

I omit altogether the consideration of children, in these remarks; for this study, as a serious occupation, or as a pursuit, in which they are expected to make any valuable attainments, is not suited to their age and capacities. There is no objection to their amusing themselves with philosophical toys, and becoming in this way acquainted with some of the simpler facts of philosophy; but there is not that gain in all that they can accomplish with safety to themselves, which may be derived from an early and proper direction of their attention to the learning of languages. In this latter pursuit they may make such attainments, as to save a great deal of time in after years; but what they can acquire in the physical sciences, would give a mature mind no trouble, and scarcely be the work of a day. But if a child is taught even by toys anything of Natural Philosophy, the simplicity proper to his age, and necessary to the just development of his powers, should not be put at hazard by teaching him much of the technical and learned language of science. Let him, like Blaise Pascal, in his infantile mathematical studies, use such terms as his own stock of words will furnish, giving him an appropriated term, only when his own resources fail him, and he asks for help.

But I proceed to my subject.

The different branches of Natural Philosophy are mixed sciences, not founded, like mathematics, upon necessary truths, and independent of all phenomena, — nor yet consisting, like Natural History, entirely of the results of observation. They are built upon observed phenomena — upon facts, of which experience is our only proof; — but these facts, being ascertained in all their important circumstances, and subjected to exact

measurement in all their relations to time and space, — are brought within the pale of mathematics, and the superstructure of the physical sciences is reared upon mathematical principles. It follows from this character of the physical sciences, that there are two kinds of proof, by which their principles may be sustained; — the one consisting in exact demonstration deduced from previously established principles, and the other in experiment. I would not be understood as affirming that every proposition is capable of both these kinds of proof, for I have already said, that some are susceptible of no other than that by experiment; and it is equally true that there are many others, perfectly well established and of the highest importance, whose only proof is mathematical demonstration. It is true, however, that these two kinds of proof may frequently be made to bear upon the same point. In consequence of this character of Natural Philosophy, and this two-fold method of proof, of which its principles are capable, it may be studied to a considerable extent, independently of the use of what has been called rather disparagingly, 'technical mathematics.' And in this way, to a considerable extent, it must be studied by those, whose circumstances will not permit them to devote much time to the study, and whose preliminary education is defective.

This method of studying Natural Philosophy, it will be perceived, is essentially defective; for as the development of the physical sciences, in their present extent, could not have been accomplished without the aid of mathematics, so neither can they be studied thoroughly without the same aid. It will therefore be necessary for the teacher, whose pupils are under the necessity of following this method, to take particular pains to supply as far as possible its deficiencies, and to prevent them from falling into loose and inexact habits of reasoning.

1. His proofs will be derived, in a great measure, from experiment, and he must be particularly careful, that the experiments, which he offers for proofs, be really such, and that they be ex-

actly attended to. If, e. g. he wishes to prove to his class the position, which the focus occupies between the centre and the surface of a concave mirror, he should have the means of measuring accurately the distances of the centre and focus from the mirror, and require his pupils carefully to note them. If he wishes to prove the law of equilibrium of the *lever*, he should have a lever, which will turn about its fulcrum like the beam of a delicate balance ; and not cheat his pupils with such an article as we too commonly see in a collection of philosophical apparatus, and which turns about its fulcrum with so much friction, that no ordinary degree of carelessness in adjusting the power and weight will cause a failure in the experiment.

If we rely upon experiment for proof, we must manage it in such a manner that it shall be proof. Experiments in Natural Philosophy are too frequently mere illustrations. The principles of the science not being generally dependent for their proof upon experiment alone, — experiments are apt to be managed more loosely than in Chemistry, and those sciences which admit no other evidence. But, if we teach Natural Philosophy without the aid of mathematics, and throw our pupils entirely upon experiment for proof, it becomes peculiarly necessary, that our experiments should be exact and perfectly free from ambiguity.

2. Another method, by which we may secure some degree of exactness in the study of Natural Philosophy, is to give, after such propositions as admit of it, numerical questions for solution. This practice appears to me to be extremely important, and it furnishes the means of applying mathematics in a degree to the study, although it be pursued independently of mathematical proofs. For this application may be made to a considerable extent, with no further acquaintance with mathematics, than a knowledge of Arithmetic. A pupil, who studies Natural Philosophy without the aid of mathematics, will be apt to acquire of many propositions but very indistinct notions ; and from

many, which are unavoidably expressed in mathematical language, he will turn away, as if they were beyond his reach. Suppose, for example, he meets with this — 'The centripetal forces of equal bodies, revolving in circular orbits, are as the squares of the velocities directly, and as the radii of the orbits inversely.' He may see it proved and illustrated by the whirling-table, but there are in it several simple ideas, not of the most familiar kind, and connected by relations, which are also not familiar, and it will be very likely to wear an air of mystery and incomprehensibleness. But let the teacher give him numerical questions for solution, — let him suppose two equal bodies — give the radii of their orbits and their velocities, and then ask for the ratio of their centripetal forces. If he will thus raise a few numerical questions out of the proposition, — the pupil will be led to note carefully every point contained in it; he will unravel it — its mysteries will vanish — it will become easy to be understood and easy to be remembered.

This method aids the memory by bringing the two well known conditions of its exercise, attention and repetition, into effective operation. We all know how effectual this method is in Arithmetic, and although not universally applicable in the study of Natural Philosophy, it may be applied to a very great extent — and especially to those parts, which are most difficult to make plain to the apprehension, and to fix in the memory of learners.

It is another advantage of this method that it teaches the pupil how to make use of the knowledge he acquires. A proposition in philosophy is apt to remain very unfruitful in the mind of a young student — and even with the more advanced, to know a fact or principle, and to know what use may be made of it, are very different matters. Let the learner be required to commit to memory and see illustrated by experiment, the law, which fixes the relation between the height, through which bodies fall by gravity, and their last acquired velocities, — the

teacher knows, that he will of his own accord think out very few of its practical applications. Let him learn that most fruitful of theorems, the composition and resolution of forces, and what does he see in it beyond the simple meaning of its terms? He may be informed indeed, that by the former of these theorems, he may compare the forces, with which bodies falling from different heights will strike the earth — and that by the latter, he may estimate the transverse strain of a given weight upon a rafter at a given inclination, or the loss of power, when a given force acts obliquely upon the arm of a lever ;— but he will hardly be the better for the information, until he sees exactly in what way these applications may be made, and he will not be master of the matter, until he has made the applications himself.

One of the great objects of study is to acquire available knowledge — and the method here recommended is directly calculated to make the knowledge acquired of this character. Another object is to give discipline to the intellectual powers and to train them to prompt and efficient action. This discipline may be general, or directed to the training of the powers to a particular exercise — to modes of thinking and reasoning proper to particular pursuits ; and it will be at once perceived that the method, which I am recommending, gives in a remarkable degree this discipline ; and it will also be readily perceived that this discipline in many cases, and especially when Natural Philosophy is studied as a preparation for the pursuit of any of the numerous arts, which involve philosophical principles — is precisely that which is most to the purpose of the learner.

I may be permitted to add one more remark upon the advantages of this method, viz — that, as in Arithmetic, so here, the multiplied application of rules and principles in numerical calculations with correct results, answers, in some respects, the purposes of demonstration ; and, indeed, in the minds of most men, who are unaccustomed to mathematical reasoning, it will

beget a higher degree of confidence in their correctness than demonstration itself.

It will be very easy for the teacher to form questions for the exercise of his pupils; but if he wishes to relieve himself of the trouble, he will find many prepared to his hand in Hutton's Mathematics, and Professor Olmstead's Natural Philosophy. I know not but other recent books may furnish them, but I recollect none.

3. I have already remarked, that the method which I have just been recommending, is not universally applicable in the study of Natural Philosophy. But there is no part of physical science, in which a similar method may not be adopted, to secure the active attention of the pupil, and to lead him to fix his mind with precision upon the point before him. Questions may be raised, which, if they do not admit of numerical solution, will require him to think, and to think accurately, in order to give correct answers. To give a few simple examples — To fix in the pupil's mind, and to make him understand clearly, *the continuance of motion by inertia*, let questions of this kind be asked —

If a horse suddenly stops what becomes of his rider?

If he suddenly starts?

If he starts suddenly sidewise?

If upon two boats striking together, the passengers in one are thrown down, but not in the other, what should you assign as the reason?

If a person leap from a carriage in motion, to the ground, he falls; — which way? and why?

From what part of the carriage, could he make his escape with greatest safety, and by what expedient might he prevent a fall?

If he leap from a wharf into a boat, which is moving, he is in danger of falling; — which way?

Many books contain abundant illustrations of this kind, es-

pecially Arnott's. But they are usually and indeed always, so far as I recollect, in the form of didactic remarks. In my opinion, it would be much better to propose them to the pupil in the form of questions, than to state the whole fact. If read by him, or if he hears them from the mouth of his teacher, in the usual didactic form, they are often too plain to awaken active attention; or if otherwise, they may be regarded only as curious philosophical anecdotes, amusing indeed, but designed rather to relieve thought than to awaken it. If, on the other hand, they are proposed in the form of questions, to which the pupil is to furnish an answer, he cannot escape, — he must think, and bring his thoughts to the point desired.

My remarks hitherto have had especial reference to those students of Natural Philosophy, who pursue it independently of mathematics. But the methods I have recommended are scarcely less important to others. Rigorous exactness in experiments should always be aimed at, lest the student acquire a habit of reasoning loosely, or be led to imagine, if their results do not come precisely to the points predicted, that there is some — he knows not what difference, between theory and experiment, which ought to diminish his confidence in philosophical investigations. And the practice of solving numerical questions, as a help to the memory, and as a means of teaching the practical application of what is learned, must under all circumstances be highly advantageous.

There is a strong tendency in this age, which has seen and is daily seeing science descending from her heights, to diffuse her instructions among those of the most humble walks of life, — to adopt the most easy, indeed, but not therefore the best method, of bringing her teaching and their capacities to an equality. Instead of raising them to her level, or rather striving to bring them as near it as may be, she is brought down to theirs, and bidden to lay aside her depth, and the exactness of her speech, that she may talk to them, as nurses

do to infants. Books which strip science of its difficulties, are commended, as if its difficulties were extraneous matters, which ought to be removed, — a sort of artificial barricade, which the learned had devised merely for the purpose of securing their own privileges and immunities from vulgar intrusion, and which the unlearned have a most republican right to war against as they please.

But Natural Philosophy, as an exact science, is necessarily allied with mathematics; and no one ought to expect to make much progress in it, without the lamp of this latter science for his guide. It is true, there is much upon its surface, which it is useful and interesting to know, and if studied even without the aid of the higher mathematics, in the way which I have pointed out, it will furnish much available knowledge. But it ought to be understood by those, who study it in this way, that, although what they have learned may be certain and useful, they are only worshippers in the outer courts of the temple; and they should be taught not to glory, as if they were familiar with its innermost recesses. This consideration is one, to which the teacher should give good heed, as bearing both upon the moral influence of science, and the advancement of intellect.

Science must indeed lisp, when she speaks to infants in knowledge; but she should, even when she lisps, endeavor to lead them along to a sufficient maturity to hear and profit by her graver instructions. If men are taught to be satisfied with the easier parts of knowledge, they are kept in perpetual minority. It is not to be imagined, that the machinery of the world and of the system, to which it belongs, should be comprehended, even so far as human reason can comprehend it, without serious and painful effort. It is not to be imagined, that the laws which govern it, can be mastered without refined means of investigation — without a language infinitely transcending, in its powers of generalization and abstraction, the

speech, which serves men for their marketing and the familiar intercourse of society.

It is a charge sometimes preferred against the physical sciences, that the moral influence of the study of them is not salutary. But there can evidently be no just foundation for such a charge, — for it is impossible that men should be less impressed with a reverence for the Deity, by knowing more of his works, or of the laws, which display his wisdom in the government of the universe. And if revelation and the course of nature have come from the same hand, it is not possible that arguments fairly drawn from the latter, should have any tendency to invalidate the former. It is true, indeed, that men may study the physical sciences without any quickening of the moral sensibilities, and so they may the metaphysical and the moral. It is also true, that the physical sciences have been abused to the purposes of unbelief, and it is equally true that the metaphysical and the moral have been abused in the same way. Abused — I say — for no science has ever exhibited a single fact or a single law, well ascertained and understood, which is inconsistent with revelation, — or pointed out a single note or impress of the Deity in any of his works, at variance with the portraiture given of him in the bible. To admit the contrary is to give the unbeliever a fatal advantage. It is not the fault of physical science, if any of her votaries so limit themselves to the contemplation of physical causes, as to forget the anterior and higher, — and in their zeal to measure motions and effects, forget the spirit, by which matter, in itself unformed and void, has

'Vital virtue infused, and vital warmth,'

and is enabled to play its part in the economy of the universe. And it is not her fault, if others, who have taken a few lessons of her, fondly misinterpret her meaning, — mistake operations for active powers — and fancy they find causes in mere general statements of effects. The fault is in the per-

son, not in the subject. Put individuals of the same disposition upon the study of any other science, and the result will be the same. Let them study the spiritual nature of man, and they will see in intellect nothing but matter fortunately organized, — in the brain, a gland, and in thought, a secretion. Let them study the moral government of God, and where they should see providence, they will see nothing but fate; and where they should discover proofs of a future retribution, they will fancy they find proofs that the world has no moral Governor. Let them launch out upon the ocean of metaphysics, and every meteor they will mistake for a pole star, or a beacon light; and every shadow, even the darkness of their own intellects, for a profound depth; and, in the pride of their blundering sagacity, they will ridicule those 'who see things as they are, and sail by surer lights' — and at last they will sink in the deep waters, which they are unskilled to navigate.

The way to vindicate the character of Natural Philosophy from such a charge as this, is to secure the proper study of it, as an exact science; and when only an imperfect knowledge of it can be attempted, to provide that such imperfect knowledge shall pass for no more than it is worth. Reasoning unbelief makes few appeals to the exacter parts of Natural Science. It deals rather with those which do not admit of demonstration — and, therefore, leave scope for an ingenious theorist to make a fair show of that which is false or even absurd. Let the student be trained to the strictness of philosophical reasoning, and be made to understand the true limits of philosophical speculation — and he will find nothing in the physical sciences, which will lead him to the very original and profound discovery, that faith is unreasonable, and revelation a piece of priestly imposition.

To secure this proper study of Natural Philosophy, let it be pursued in its alliance with mathematics, when this is practicable, and let no whit of vigorous demonstration be abated;

but when this cannot be done, let the expedients I have already pointed out, be freely employed, and whatever the student accomplishes, let it be in the exactest manner possible.

It may be thought, that the course I recommend, will make the study of Natural Philosophy as unattractive and discouraging as possible. It will, indeed, be less inviting to the indolent, to those who love to make easy acquisitions to be talked about, and to those who would value Natural Philosophy as stuff to make dreams of, and want materials of such accommodating flexibility, that they may be twisted to any purpose. But to him who is pleased in certain knowledge, and feels that he knows nothing till he knows it exactly, and to him who can enjoy the clear and steady light of truth, — application of mathematical reasoning to Natural Philosophy, increases the interest of the study in a twofold degree. My own experience does not teach me, that mathematics is the least interesting of studies to young persons.

But let it be remembered, that the most attractive is not always the most useful study. 'Nil sine magno vita labore dedit mortalibus.' It is in study, as in trade, — we get nothing for nothing. We must make sacrifices and efforts for valuable attainments. Use — laborious use, must give vigor to our intellects, if we would make 'men in understanding.' 'What young men require,' says an eloquent living philosopher, * 'are books learned and profound, and even somewhat difficult; that they may be accustomed to encounter difficulties, and that thus they may serve their apprenticeship to labor and to life; — but it is really a pity to distribute to them, in the most reduced and slightest form, a few ideas without any real substance, communicated in such a manner, that a boy of fifteen years of age may learn the little book by heart in a day, may be able to recite it from beginning to end, and thus be induced to believe that he is not ignorant of humanity

* Cousin, Linberg's translation, p. 357.

and of the world. No, gentlemen, men of energetic minds are formed by energetic studies.'

These remarks, gentlemen, I suppose, need no apology — for the tendencies and the practices of the present age, make the advantages of the mathematical study of Natural Philosophy an important subject of discussion ; and the moral influence of any study, will always be a subject of high consideration with the teacher, who has just views of life. And it is also a prime question in education, how the intellect shall be invigorated — and the powers of the reason and the understanding brought to the stature and strength of manhood.

But if pupils are put upon the study of somewhat difficult books, another question arises of special importance to the teacher, how he may awaken their interest and excite them to the requisite exertion ; — and this question appears to me more important than any one, which belongs to the mere technical part of instruction. An excited mind disdains difficulties, and in overcoming them acquires new power and confidence ; and the teacher accomplishes more for the benefit of his pupil, if he excites him to surmount an obstacle by his own efforts, than if he makes him an inclined plane and a rail road, and lands him so gently on the other side, that he knows not where it was.

Among the means of exciting the minds of students in Natural Philosophy, one is derived from the consciousness of the acquisition of new power, which may very readily be excited, by proposing important questions, which the student is conscious he could not before have solved. Nothing of this kind is more striking than the power to calculate eclipses — or the ability, by a few observations upon heavenly bodies, situated at almost inconceivable distances from us, to find our own place, however wildly we may have strayed upon the trackless ocean, or the pathless desert. The method, which I have already so largely treated, of illustrating and fixing each principle by questions for solution — will have a tendency to keep alive the interest of students, in the way of which I am now speaking.

Another method is by proposing questions for them to solve, which, from any circumstances, may have acquired an adventitious interest. Their attention is thus secured to all the principles involved in it, and they acquire an increased importance. I have known a class of boys so strongly excited in this way, upon a difficult question in Algebra, by hearing that it had puzzled the mathematicians of the vicinity, that the sound of the dinner bell, so welcome to the hungry school boy, could not persuade them to leave it.

Another method is by pointing out to students, as they arrive at them, propositions which are particularly important in relation to subsequent parts of the study. In this way, I have known difficulties surmounted long before they were reached, by the pupils, having been properly prepared to encounter them.

Similar to the last mentioned, is the method of explaining to the pupil, as he comes to it, the great reach and all pervading influence of any very general, and perhaps in itself uninteresting principle. Take, e. g. the theorem of the composition and resolution of forces — a boy may easily understand it, but when he first learns it, he will see very little in it, and not distinguish it in the value he puts upon it, from any of the most limited application. But let him understand, before he applies himself to it, that it explains equally the theory of the lever, and the position of the magnet under galvanic influence; that it governs the motions of a ray of light, — of a stone hurled from a sling — and of the moon in its orbit,— nay, that there is not a movement among the heavenly bodies, or among the drops which form the vast mass of the ocean, or mount upon its surge, when driven by the wildest tempest, but is in obedience to this simple law, and he will look upon it with different eyes, and study it with new zeal. He will regard it, as a philosopher's stone, simple in aspect, but wonderful in virtue, and he will possess himself of it, as of a key of knowledge.

We may find another means of exciting the zeal of students by referring to the history of important theorems. Upon the discovery of one, the fate of science has turned. Another has secured the undying reputation of some great name. Another is the glory of a century. A notice of Kepler, e. g. and of the influence of his discoveries upon astronomy, could not fail to give additional interest to the remarkable laws which still go by his name.

When difficult propositions occur, in the course of the study, it will be found of great use to point them out, as we arrive at them, as being difficult in the apprehension of students generally, — to show wherein the difficulty lies, and to give a brief analysis of the demonstration, before the pupil is required to get it. By a little preparation of this kind, accompanied with a word or two of encouragement, I have known a class to prepare themselves in an admirable manner, and that with great apparent ease, in one of the most difficult lessons in mechanics. This point is worth much consideration, for it shows us a very important means of exciting the student — and at the same time exhibits the proper and most effective method, by which we can assist him in overcoming difficulties. Oftentimes the difficulty of a demonstration consists in its containing the proof of a number of distinct points, which might have been separated into so many propositions; and if the pupil is taught how to analyze it, and to make out these points, and to see their relation to the whole, — he is taught how to master the difficulty by his own energies, — he is taught how to study (a matter always of great importance) and how to reason. This analysis of difficult demonstrations the pupil should be carefully taught to make, until he can do it with ease.

But I have detained you long upon these points, and I proceed to consider another important question in reference to teaching Natural Philosophy; — viz. whether instruction may

most profitably be given at recitations, or lectures, or by what combination of the two methods.

To me it appears manifest that neither text-book recitations, nor lectures, can ordinarily be dispensed with.

Recitations of some kind, either from a text book or upon previous lectures, are necessary in order to secure the attention of the pupil. Again, the knowledge of a pupil who hears lectures merely, and is left to work up his knowledge into shape and consistency as he pleases, is very apt to be in the condition, so aptly described by one who, in reply to a question, answered, 'I know, if you do not ask me.' It will be indistinct. He will seem to himself to know, while yet his conceptions are so vague, that he cannot easily put them into shape for utterance. It is only by being made to reflect carefully upon what he learns, that he can know it exactly; and I know of no way, in which he can be so certainly brought to this careful reflection, as by well digested questions, to which he is required to give precise answers. It may not be improper here to add, that we fail of the peculiar benefit of recitation, if answers are not required to be precise. It will not do for the teacher to be satisfied, if he discovers that the pupil has some sort of notion of what he should say, and to relieve him by saying — 'yes, I see you understand it,' — while in fact he is embarrassed in framing his reply, only because he but half understands it.

These advantages of recitation may be had in examinations founded upon preceding lectures, — but in Natural Philosophy these are hardly sufficient, for the mathematical demonstrations are better learned by the pupil from a book, and will be better recited at a text-book recitation. Demonstrations may indeed be taught at lectures; and if a teacher could devote his time to a few pupils, I am not sure that he would not teach them better in this way, than by sending them away to learn them from books. But in the ordinary arrangements of our schools, I suppose it would be impracticable.

But on the other hand, lectures are necessary for the purpose of furnishing experimental illustrations and proofs. The importance of these is so obvious, that I shall not here dwell upon it. It may be said, that experiments might be given at a recitation; but this would be combining a lecture in some degree with a recitation — a practice to a certain extent undoubtedly advantageous. To do this, however, to a great extent would hardly be practicable; for to introduce a great number of experiments into a recitation, would break the continuity of it, and too much distract the attention. Lectures, in addition to and distinct from recitations, are also of great advantage; as there is much useful knowledge to be conveyed to the student, in the way of illustrations, and application of principles to the useful arts, and the practical purposes of life, which cannot be so conveniently communicated in any other way. They afford also the best opportunity for an extended discussion of principles. Text books for recitations should be as brief as may be, consistently with perfect perspicuity; and rather the vehicles of the demonstrations and of that part of instruction, which cannot well be left to be supplied by the teacher.

To introduce a great deal of other matter, which might be valuable and interesting in lectures, would make a recitation book long and tedious, and lead to a useless consumption of time.

The question now occurs, if instruction be given both by recitations and lectures, in what manner shall they be combined.

There are some advantages in having the lectures proceed at the same time with the recitations; for in this way, the illustrations and experiments referred to in the recitations, are given as they are wanted, and the student is made acquainted with the apparatus to which he must frequently refer in his recitations; and he is assisted in forming distinct conceptions of those powers of matter, and of those facts, upon which the reasonings in his text book will frequently be built.

But there are advantages in making the lectures a sequel to the text-book instruction. It is an embarrassment which a lecturer sometimes feels, that, in giving an account of some natural phenomenon, — or some ingenious and useful application of science to the arts, he has occasion to refer to principles scattered over the whole extent of Natural Philosophy, while his class has passed over but a portion, and perhaps a small portion of it. It is impossible for us to keep the different sciences, which make up Natural Philosophy, perfectly distinct. They often meet upon the same point, and a knowledge of several is frequently necessary to explain a single phenomenon. Questions in meteorology, e. g. cannot be discussed without an acquaintance with the doctrines of heat and light — of electricity — of specific gravity, &c. If we wish to measure the velocity of light we must know something of astronomy. If we wish to explain the operation of the steam engine, we must be acquainted with the science of heat — its effect upon elastic vapors, and with mechanics. From the embarrassment arising from this source, the lecturer is freed, if his class has previously taken a survey, although not perhaps a minute one, of the whole ground, and learned the principles of the different branches of Natural Philosophy from a text book, — and he may proceed in any discussion, without being required to break its continuity, by frequent episodes, in the way of explanation.

To secure the advantages of both these methods of disposing of lectures, the best arrangement would probably be to combine them, — to give the text-book instruction in the apartment where the apparatus is kept, and when apparatus is described, to show it, and to exhibit at the recitation a few of the simplest and most fundamental experiments, — leaving the fuller illustrations, and the more ample discussions, and the extension of the whole subject, for a subsequent course of lectures. It would sometimes be of advantage even to anticipate recita-

tions, by an exhibition of apparatus, and even by a simple experiment. At the close of a recitation, e. g. if some article of apparatus, new to the student, is described or referred to in the next lesson, let it be shown to him. In this way much time may be saved, — he will get a better notion of the apparatus, than by any description, and will more intelligently follow out the description of experiments to be made with it. In the same way, it may be sometimes useful to give beforehand a simple experiment. If, e. g. the solar spectrum were shown to a class previously to their recitation upon it, they would prepare for it more intelligently and with more interest.

There are many schools, which have not the ability to furnish a full course of lectures, in addition to the text-book instruction; and when this is the case, it would probably be the best way to combine the lectures with the recitations, and to leave it to the teacher's ingenuity to remedy whatever inconveniences might arise from this method.

I have now, Mr President and Gentlemen, taken up the several points, which have appeared to me most important in relation to the subject of my lecture; imperfectly, I am aware, but as I have been able, I have given the results and observations of an experience, not the most recent, for it is several years since I have taught Natural Philosophy, and doubtless I have added nothing new to what experience has already suggested to those, who have been accustomed to teach the physical sciences. This however has not been the object of my lecture, but to say what belongs to the subject and is of principal importance. So far as I have done this, I have accomplished my purpose,— so far as I have failed in it, I must claim your indulgence.

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